

19980819.qrp v01_n188.qrs.980819

Date: Wed, 19 Aug 1998 19:03:20 EDT
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 1188

QRP-L Digest 1188

Topics covered in this issue include:

- 1) [17835] re: QRP gear for sale
by jalbertin@juno.com (Jerry Albertin)
- 2) [17836] Solar 8-18: X-CLASS FLARES!!!
by Paul Harden <pharden@aoc.nrao.edu>
- 3) [17837] Re: The PERFECT GROUND?
by Ab7wy@aol.com
- 4) [17838] Re: The PERFECT GROUND?
by Vic Rosenthal <rakefet@rakefet.com>
- 5) [17839] Elmer101: Sprint Logs?
by wa8rxi@juno.com (Rick Arzadon)
- 6) [17840] Re: ten tec rx
by "George T. Baker" <w5yr@swbell.net>
- 7) [17841] Bands Dead?; 73 KHz band; what to do?
by we6w@juno.com (Ed Loranger)
- 8) [17842] RE: Tanner-White Receiver
by "Harry, WA3PTG" <hhurst@delaware.infi.net>
- 9) [17843] Tanner-White Receiver
by "Harry, WA3PTG" <hhurst@delaware.infi.net>
- 10) [17844] Fall QRP field event?
by Allan Taylor K7GT <k7gt@qsl.net>
- 11) [17845] More antuna tenner & Z-match meandering stuff
by nilsbull@juno.com (Nils R Young)
- 12) [17846] ZM-2 trouble
by "Beaks" <beaks@westco.net>
- 13) [17847] Zombie Net.
by we6w@juno.com (Ed Loranger)
- 14) [17848] Re: Link Coupled Tuners
by k5zty@juno.com
- 15) [17849] X
by RangerSF5@aol.com
- 16) [17850] Re: The PERFECT GROUND?
by Ab7wy@aol.com
- 17) [17851] ARK and TAC-1
by RangerSF5@aol.com
- 18) [17852] WB2QAP Logger Program
by "Robert J. Gobrick" <rgobrick@worldnet.att.net>
- 19) [17853] HB: Isolated pads (islands?)

- by sigcom@juno.com (Stephen M Smith)
- 20) [17854] Re: ten tec rx
by "George T. Baker" <w5yr@swbell.net>
- 21) [17855] Re: ten tec rx
by Tim Ahrens <tahrens@inetport.com>
- 22) [17856] Re: Looking for W6EMT
by jerry schnor <jerrylee@cwms.net>
- 23) [17857] Re: Looking for W6EMT
by W7LS <w7ls@blarg.net>
- 24) [17858] Re: SuperSensitive headphones for backpacking
by W7LS <w7ls@blarg.net>
- 25) [17859] QRPP "5 Watts from 10 2N2222 Transistors" Questions
by Dave Willey <dave@cds1.net>
- 26) [17860] Follow up: L/C Meter II
by PGSPersEng@aol.com
- 27) [17861] Re: The PERFECT GROUND?
by "George T. Baker" <w5yr@swbell.net>
- 28) [17862] Re: LQQKing for ED Crowell
by "George T. Baker" <w5yr@swbell.net>
- 29) [17863] "CB Slider" by Bruce Muscolino
by Jerry Parker <jparker@fix.net>
- 30) [17864] Re: "CB Slider" by Bruce Muscolino
by "Harvey D. D. Hetland" <n6mm@earthlink.net>
- 31) [17865] August "NWQ" Now On Line
by "Bill Todd" <bill@willapabay.org>
- 32) [17866] Re: HB: Isolated pads (islands?)
by Paul Harden <pharden@aoc.nrao.edu>
- 33) [17867] Re: The PERFECT GROUND?
by ARDUJENSKI@aol.com
- 34) [17868] Re: The PERFECT GROUND?
by Ab7wy@aol.com
- 35) [17869] Re: New ADI DDS chip
by Stephen John Farthing <stephen@stevef.demon.co.uk>
- 36) [17870] Info on Roy Gregson (Emtech)
by W7LS <w7ls@blarg.net>
- 37) [17871] Re: QRPP "5 Watts from 10 2N2222 Transistors" Questions
by Leon Heller <leon@lfheller.demon.co.uk>
- 38) [17872] Re: Very low supply voltage PA circuits
by n2tpa@juno.com (Bill d Lazure)
- 39) [17873] Re Cut Numbers
by Joseph Mikuckis <k3chp@erols.com>
- 40) [17874] Re: The PERFECT GROUND?
by "L. B. Cebik" <cebik@utkx.utcc.utk.edu>
- 41) [17875] Glittery wagon!
by Greg Weinfurtner <gweinfurt1@ohiou.edu>
- 42) [17876] Re: New ADI DDS chip
by mikemo@ibm.net
- 43) [17877] Re: The PERFECT GROUND?

by Michael Neverdosky <MichaelN@cycat.com>
44) [17878] mfj 9040
by ac5ez@webtv.net (Larry B)
45) [17879] L/C Meter II from AADE
by NoesisDG@aol.com
46) [17880] TNX ON GRND COMMENTS
by ARDUJENSKI@aol.com
47) [17881] Zombie numbers ???
by "ukii" <ukii@megsinet.net>
48) [17882] RE: QRPp "5 Watts from 10 2N2222 Transistors" Questions
by Tracy@bytemark.com (Tracy)
49) [17883] Re: Bands Dead?; 73 KHz band; what to do?
by Bob Hightower <ki7mn@dancris.com>
50) [17884] Re: Re Cut Numbers
by Vic Rosenthal <rakefet@rakefet.com>
51) [17885] 11-2-10 project, update
by Steven Weber <kd1jv@moose.ncia.net>
52) [17886] Re: SST/40 bandwidth issues
by Allan Taylor K7GT <k7gt@qsl.net>
53) [17887] Zombie Shirt Alert
by "Doug Hauff" <slmachco@fix.net>
54) [17888] Re: ICQ-QRP
by "George T. Baker" <w5yr@swbell.net>
55) [17889] HB: Isolated pads (islands?)= "Paddyboard"
by PDouglas12@aol.com
56) [17890] VLF Receiver
by "Kevin Muenzler WB5RUE" <wb5rue@stic.net>
57) [17891] Re: SuperSensitive headphones for backpacking portable
by Glen Leinweber <leinwebe@mcmail.cis.McMaster.CA>
58) [17892] FS QRP++
by Bill Schiller <schiller@cherokee.nsuok.edu>
59) [17893] Re: HB: Isolated pads (islands?)
by flydnq7x@primenet.com (Floyd Smithberg)
60) [17894] Re: SuperSensitive headphones for backpacking
by Allan Taylor K7GT <k7gt@qsl.net>
61) [17895] Re: Bands Dead?; 73 KHz band; what to do?
by "Ron Smith" <resmith666@uswest.net>
62) [17896] Battery Recharge
by "James Fielden" <fielden@utkux.utcc.utk.edu>
63) [17897] Re: SST/40 bandwidth issues
by Arjen Raateland <Arjen.Raateland@vyh.fi>
64) [17898] Re: Bands Dead?; 73 KHz band; what to do?
by gsurrency@juno.com (Gary L Surrency)
65) [17899] NorCal 20 kits sold out!
by wager@juno.com (James W. Cates)
66) [17900] NERDS and Cut Numbers
by FrConrad@aol.com
67) [17901] Re: Very low supply voltage PA circuits

by KC5TJA <kc5tja@topaz.axisinternet.com>
68) [17902] Re: NERDS and Cut Numbers
by KC5TJA <kc5tja@topaz.axisinternet.com>
69) [17903] Re: Cut numbers
by Allan Taylor K7GT <k7gt@qsl.net>
70) [17904] Re; 20 Meter antenna THAT WORKS
by Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
71) [17905] Roy Gregson - W6EMT
by ROYGREGSON@aol.com
72) [17906] K6STI e.mail addr ??
by Niel Skousen <skousen@srv.net>
73) [17907] Hey, all!
by "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
74) [17908] Re: Questions - Pauls book
by Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
75) [17909] SPAMing the CB Slider
by MNHopkins@aol.com
76) [17910] Elmer 101 sprint
by Michael Maiorana <mikemo@ibm.net>
77) [17911] Newbie question - Random Wire Antenna
by "Barry L. Geipel" <bgeipel@primenet.com>
78) [17912] Re: NERDS and Cut Numbers
by Roger Hightower <n7kt@earthlink.net>
79) [17913] Re: NERDS and Cut Numbers
by n4js@pobox.com (John Sielke)
80) [17914] Re: Cut numbers
by Kevin Bunin <p014455b@pb.seflin.org>
81) [17915] Re:Cut Numbers
by Ed Loranger <we6w@qsl.net>
82) [17916] 2000 contacts
by ac5ez@webtv.net (Larry B)
83) [17917] BUBBA Sprint / Software Engineers Needed (really!)
by Joe Gervais <vole@primenet.com>
84) [17918] Re: NERDS and Cut Numbers
by "Bill Todd" <bill@willapabay.org>
85) [17919] Re: NERDS and Cut Numbers
by ARDUJENSKI@aol.com
86) [17920] Re: The PERFECT GROUND?
by applitech@mcg.net (Claton Cadmus)
87) [17921] Shucks, folks there IS a CB Slider board
by MNHopkins@aol.com
88) [17922] Coil lube update
by Bob Liesenfeld <wb0poq@visi.com>
89) [17923] Re: NorCal 20 kits sold out!
by Monte Stark <ku7y@sage.dri.edu>
90) [17924] Wide-band receiver front end question
by Bill Jones <kd7s@psnw.com>
91) [17925] Re: HB: Isolated pads (islands?)

- by Leon Heller <leon@lfheller.demon.co.uk>
- 92) [17926] twin-lead through metal, how?
by "Adam B. Kanis" <adam-kanis@uiowa.edu>
- 93) [17927] RE: tuner losses
by cy r currier <crc3@telplus.net>
- 94) [17928] Re: NERDS and Cut Numbers
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 95) [17929] Re: Wide-band receiver front end question
by Chris Trask <ctrask@primenet.com>
- 96) [17930] Re: Drilling holes for ZM-2
by Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
- 97) [17931] Re: Wide-band receiver front end question
by Paul Harden <pharden@aoc.nrao.edu>
- 98) [17932] Smart Charger Deal #2!!!!
by Ed Loranger <we6w@qsl.net>
- 99) [17933] Re: Wide-band receiver front end question
by Glen Leinweber <leinwebe@mcmail.cis.McMaster.CA>
- 100) [17934] Re: Wide-band receiver front end question
by KC5TJA <kc5tja@topaz.axisinternet.com>

Date: Tue, 18 Aug 1998 19:23:14 EDT
From: jalbertin@juno.com (Jerry Albertin)
To: qrp-l@Lehigh.edu
Subject: [17835] re: QRP gear for sale
Message-ID: <19980818.192527.5495.0.JAlbertin@juno.com>

The MFJ 9020 transceiver , 971 antenna tuner along with the Trac keyer
are
spoken for.

Still available: MFJ 9040 transceiver for \$105 and the Bencher straight
Key for \$45.

Thanks to all who replied.....Jerry

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Or call Juno at (800) 654-JUNO [654-5866]

Date: Tue, 18 Aug 1998 17:33:40 -0600 (MDT)
From: Paul Harden <pharden@aoc.nrao.edu>
To: qrp-l@Lehigh.edu

Cc: GQRP-L List <gqrp-l@blacksheep.org>
Subject: [17836] Solar 8-18: X-CLASS FLARES!!!
Message-ID: <Pine.SOL.3.91.980818170822.16401B-100000@zia>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

SUMMARY: [for those not wanting to read the whole thing]

There were two X-CLASS FLARES and one M-CLASS FLARE today. These are biggies!!! However, they occurred near the limb of the sun, so the shock wave and particle radiation from them will be missing the earth. A coronal hole facing the earth may cause some minor storming in the next two days. More large flares could occur over the next couple days.

You may hear about these flares on the news ... Art Bell* will no doubt make a big deal about them ... but they will not be effecting the Earth. You read it here first!

If anything, the bands should be good over the next few days as these flares are expected to raise the solar flux to near 150. A good time for QRPing. Do not be alarmed by the "big flare" reports.

*Art Bell (for our overseas bretheren) is an evening radio talk show that covers things like UFO's, power of the pyramids, general end-of-the-world alerts. Art is W60BB (?) and tends to get real excited on his show when a large flare occurs ... right up there with a major earthquake for some reason.

> SDF NUMBER 230 ISSUED AT 2200Z ON 18 AUG 1998

> IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 17/2100Z
> TO 18/2100Z: SOLAR ACTIVITY HAS BEEN HIGH. TWO X LEVEL (1.2 AT
> 17/2120UT AND 2.8 AT 18/0818UT) AND ONE M LEVEL (1.5 AT 18/0414UT)
> X-RAY EVENTS HAVE OCCURRED IN THE LAST 24 HOURS.

X-Class flares are the largest category of flares. Today's X-1 and X-2 are the smallest of the X-class flares, but still significant events.

> ... OPTICAL AND X-RAY SENSORS HAVE SHOWN CORONAL
> LOOPS AND RAIN AS WELL AS ACTIVE SURGES AND BRIGHTENINGS.

A large flare throws mass outward from the sun, which gets caught in the magnetic field of the disturbance. This mass "paints" an outline of the magnetic field lines, appearing as loops that leave

and re-enter the solar surface. In other words, just like the classic photos you see of a large flare!

- > NO PARTICLE, PCA, OR GLE EVENTS
- > HAVE TAKEN PLACE, AND THEY ARE NOT EXPECTED TO OCCUR.

Today's flares were on the limb of the sun ... meaning the shock wave of the disturbance is hurling particle into space nearly perpendicular to the Earth AND WILL MISS US. If these flares were near the center of the sun, the shock wave would likely hit the earth, and the effects of an X-class flare is usually a severe geomagnetic storm/HF blackout.

So we lucked out on this one ... today's flares may very well cause the solar flux to go higher, but no geomagnetic storm appears likely.

- > IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
- > MODERATE TO HIGH.

Magnetic complexities on the solar surface indicate that the sun is still capable of producing further M or X class flares.

- > IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 17/2100Z TO 18/2100Z:
- > THE GEOMAGNETIC FIELD HAS BEEN QUIET. A CORONAL HOLE WHICH EXTENDS
- > FROM THE NORTHERN POLE TO ALMOST N30 IS BELIEVED TO BE MOVING ACROSS
- > THE CENTRAL MERIDIAN AND INTO A GEOEFFECTIVE POSITION.

A coronal hole (which actually looks like a crack or river) allows particle radiation to escape the sun, which can cause geomagnetic storming if it reaches the earth. "Geeffective position" means the particle outflow from this coronal hole WILL LIKELY HIT THE EARTH, and thus geomagnetic storming in 2-3 days may occur. This has nothing to do with today's flares, however.

- > THESE COMBINED WITH AN EXPECTED
- > HIGH SPEED STREAM ARE CAUSE FOR EXPECTING HIGHER GEOMAGNETIC
- > ACTIVITY IN THE NEXT 3 DAYS.

- > IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS
- > EXPECTED TO BE UNSETTLED TO ACTIVE WITH ISOLATED MINOR STORM
- > CONDITIONS AT HIGHER LATITUDES NEAR THE END OF THE DAY AND LATER IN
- > THE PERIOD.

- > III. EVENT PROBABILITIES 19 AUG-21 AUG
- > CLASS M 75/75/75 <--- a 75% chance for more M-class flares
- > CLASS X 25/30/30 <--- and 25% chance for more X's !!!
- > PROTON 10/10/15
- > PCAF GREEN <--- No Polar Cap Absorption event YET
(AL7FS is still in the clear!)

> IV. PENTICTON 10.7 CM FLUX
> OBSERVED 18 AUG 133
> PREDICTED 19 AUG-21 AUG 140/140/145 <--- sudden increase due to
> 90 DAY MEAN 18 AUG 114 todays activity

> V. GEOMAGNETIC A INDICES
> OBSERVED AFR/AP 17 AUG 001/005
> ESTIMATED AFR/AP 18 AUG 005/010
> PREDICTED AFR/AP 19 AUG-21 AUG 010/015-015/020-020/020

The predicted numbers for geomagnetic activity will likely change tomorrow as the effects of the coronal hole and further possible flaring are known.

72, Paul NA5N
National Radio Astronomy Observatory
Socorro, New Mexico

Date: Tue, 18 Aug 1998 19:47:11 EDT
From: Ab7wy@aol.com
To: qrp-1@Lehigh.EDU
Subject: [17837] Re: The PERFECT GROUND?
Message-ID: <c9014d23.35da1280@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

In a message dated 98-08-18 13:58:30 EDT, you write:

<< drilling down say 33 ft
and inserting a copper pipe to act as the ground side for a vertical, >>

wow! thats a great idea! i can only imagine how well something like that would work, it would take some work but well worth it im sure.
i'd be interested in the results if anyone tries
this, keep us up to date. :-)

73.....Adam, AB7WY

Date: Tue, 18 Aug 1998 17:01:20 -0700
From: Vic Rosenthal <rakefet@rakefet.com>

To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [17838] Re: The PERFECT GROUND?
Message-ID: <35DA15D0.A480FD0A@rakefet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Ab7wy@aol.com wrote:

>
> << drilling down say 33 ft
> and inserting a copper pipe to act as the ground side for a vertical, >>
>
> wow! thats a great idea!

NOT!

The actual ground around the pipe would cause big losses in the buried half of the dipole. The best ground for a vertical antenna, short of saltwater, is a good radial system -- either buried close to the surface, or elevated. Some think (but this is controversial) that the absolute BEST is a radial system elevated about 1/10 wavelength or so. The conventional view is that a system of 120 1/4 wave radials a few inches below the surface is close to optimal for a 1/4 wave vertical. Proponents of elevated radials claim you can get away with far fewer radials if the system is elevated.

Vic, K2VCO

Date: Tue, 18 Aug 1998 20:19:33 EDT
From: wa8rxi@juno.com (Rick Arzadon)
To: qrp-1@Lehigh.EDU
Subject: [17839] Elmer101: Sprint Logs?
Message-ID: <19980819.002007.4223.2.WA8RXI@juno.com>

Is anyone accepting logs for the above ?
72, Rick Arzadon - WA8RXI Taylor, MI.

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Or call Juno at (800) 654-JUNO [654-5866]

Date: Tue, 18 Aug 1998 19:50:02 -0500

From: "George T. Baker" <w5yr@swbell.net>
To: jwodell@ameritech.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [17840] Re: ten tec rx
Message-ID: <35DA213A.917E3D2D@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The ICOM IC-PCR1000 is in a separate small box interfaced to a computer via the serial port. Price is around \$450-\$480 or so street. Controlled via Windows program supplied by ICOM. It would work for QRP but the filters are not all that great for crowded bands and the front end is pretty "tender" for nearby strong signals.

The WinRadio from Australia is on an ISA card that plugs in the computer internally. I understand that the performance is similar to the PCR1000.

Both radios have gotten only lukewarm reports in the scanner community. Seems that they are too slow in their scanning, etc. to suit the experts!

The TenTec sounds like a great deal for an hf, computer-controlled receiver. And the price is certainly right! ;^)

Hope this means that TenTec is going to offer a fully controlled HF transceiver a la the Kachina 505.

72/73, George didit dit
Amateur Radio W5YR, 52 years and counting! 33.2 N 96.6 W EM13RE
QRP-L #1373 QRP ARCI #9583 FISTS #4930 ARS #403 ICQ #16819496
AutoPOWER Systems, Fairview, TX (30 Mi. NE of Dallas) 10-X #11771

Jerry W. O'Dell wrote:

>
> Just got an ad for the new ten-tec computer controlled
> receiver. 100khz to 30 mhz.
>
> Anyone have any thoughts on the thing? Unless you had a
> laptop, you couldn't use it for qrp. But its specs ain't bad,
> and it is in a box separate from the computer.
>
> My computer puts out more rf than my ham station, so
> this is a welcome way to do it. I think Icom has the thing
> inside the computer.
>
> If you didn't get the mailing, it's \$299, \$279 for ten-tec

> recent customers.
>
> 73 jerry w8gnd

--

72/73, George didit dit
Amateur Radio W5YR, 52 years and counting! 33.2 N 96.6 W EM13RE
QRP-L #1373 QRP ARCI #9583 FISTS #4930 ARS #403 ICQ #16819496
AutoPOWER Systems, Fairview, TX (30 Mi. NE of Dallas) 10-X #11771

Date: Tue, 18 Aug 1998 20:52:36 EDT
From: we6w@juno.com (Ed Loranger)
To: qrp-l@Lehigh.EDU
Subject: [17841] Bands Dead?; 73 KHz band; what to do?
Message-ID: <19980818.174248.2215.3.we6w@juno.com>

Esteemed QRP friends, have I missed something??
I've checked from 40 to 10 meters and hardly anything
can be heard. Just the usual code practice on
7100 and some weak signals elsewhere.

The sound of snow falling on the aerial... Not
really QRN,, just a 40 dB attenuator blanketing
the airwaves.
Hey, let's talk dB's Yeah! --- Not!

Sorry to hear of the demise of the 73 KHz band.
I had hoped it would survive, then I read in
an earlier post it died...

Now I hear Juno won't work on Windows <95???
Future releases being forced on us? Geez, I hope
we survive. Of course all this is hearsay until
I see it myself....

What, can't push the ads fast enough? Actually,
the ads are nice and useful information, too bad
it takes longer to display them than my entire email
session! Really sorry the east coast club lost
their Juno acct. I do know I've hunted for Juno's
published limits on mailboxes and such, even tested
it by sending myself split UU-Encoded binary programs
for later assembly/decoding on my computer. It worked
just fine but I did fill up my mailbox at about 5 Megabytes.

Stayed home from work and fixed my bike today. will be trekking the 11 miles to work agn. manana.

Sure wish someone was on the air. All dead. 10 thru 40 at least...

Nuttin' ta do...

72, Ed WE6W QRP-Z#106 <http://www.qsl.net/we6w>

Enjoying Ham Radio every day! Santa Rosa, CA.

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Or call Juno at (800) 654-JUNO [654-5866]

Date: Tue, 18 Aug 1998 21:13:15 -0400
From: "Harry, WA3PTG" <hhurst@delaware.infi.net>
To: <qrp-l@Lehigh.EDU>
Subject: [17842] RE: Tanner-White Receiver
Message-ID: <199808190059.UAA05601@fh101.infi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

The following is the reply to an email I sent a few weeks ago to to Dave White, the designer of the Tanner-White kit. With his permission:

Yes, the kit should still be available through BG Micro in Dallas, TX. Their order number is 1-800-276-2206, and the kit part number is KIT-B00. You should call them and make sure some kits are available and/or when they will have some in stock before posting to the QRP-L mailing list.

The kit has had slow but steady sales over the past three years and I have tried to promote it. Chuck, K5F0, who was just inducted into the QRP Hall of Fame helped me promote it when it first came out, but results were "great kit", but very few orders. It was supposed to be linked from the QRP-L site on the internet, but it was removed or never was posted.

The surprising aspect of this was the number of hams from outside the United States that are interested in the kit. They seem to still be

building equipment and homebrewing a lot. I am looking for someone overseas to stock the kit and help with overseas orders.

After spending a lot of time and money trying to promote it when it first came out, I was discouraged by the response and then left it to manage on its own. The initial 150 kits were sold out this past year, but I don't know if another batch was made. BG Mirco has been handling the mail-order part of the kit and has been doing a great job.

I made the kit large so that hams with large hands and elementary knowledge of electronics could build the kit with no problems. All the email I have received about the kit has been very positive and everyone seems to like it a lot.

As far as your question "is it that hard to market a receive only kit?", my answer would be no if you can get past the fact that very few in ham radio builds anything anymore and keep at it in spite of very little response from the ham community. I have to admit that I got discouraged early on and gave up on actively promoting it. Every once in a while when I'm surfing ham pages, I'll ask for a link at a site.

I appreciate your interest in the kit and if you have any problems getting one, I'll talk to Jim Tanner and see if we can't get it rolling again. He loves the kit and would like to see more sales himself.

Your welcome to link it from any site that you want, but use the following address: <http://www.ai.com/receivers>

Let me know of any responses you get and if I can help in any way.

73's,

David White, WN5Y

I'm home.
Life is good.
QRP-L #1464

Date: Tue, 18 Aug 1998 21:11:23 -0400

From: "Harry, WA3PTG" <hhurst@delaware.infi.net>
To: <qrp-1@Lehigh.EDU>
Subject: [17843] Tanner-White Receiver
Message-ID: <199808190059.UAA14824@fh101.infi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

For those who haven't heard of the Tanner-White, it's a single band superhet board kit. Tanner sells them for \$40 walk-in, and \$44 mail order. B. G. Micro also carries them.

The twist with this radio is the broad-banded IF strip consisting of a broadband transformer, an MMIC IF amp, another broadband transformer and the product detector.

To convert the radio to another band, you would change the input toroid, vfo toroid, and the crystals. As supplied it can be setup for 80, 40 or 20 with the 10 mhz crystals supplied, and any other HF band by changing the toroids and the IF crystals. Information is provided for putting the radio on any HF band.

Called BG Micro on 7-17 and ordered the kit, with shipping it was \$49.50. A few days later it was in the shack, everything looked like good quality stuff, the board was about 4 1/2 x 6", tinned, silk-screened, and good quality. Huge by today's standards, but great for tinkering & experimenting.

It took about 3 hours to read the docs and finish the board. A week later I got around to powering up the radio, and of course, it didn't work.

Muttering "Now I remember why I quit building Heathkits" I got out the magnifying glass and a light and went over the board, and of course, it was my fault. I missed soldering the input transformer to the product detector. After *finishing* the kit again, I hooked up a power supply, and fired it up. It worked!

Laying open on the bench, WWV and several broadcast stations came thru along with the 40 meter sigs. So, back on the shelf it went.

Last week, while wandering the flea market behind the Quakertown Farmer's Market, I spotted a really nice radio cabinet. I was weak, and paid \$1 for it. Should have held out for 50 cents. Anyway, the radio now resides in an OREO tin.

I'm very happy with this kit. It works as advertised and only cost a few bucks more than the dc receiver kits. I never could get a dc radio to run on a power supply without a lot of hum, but this one works fine, and I sure like having single-signal reception again. It's a good basic radio, built so there is room for all the frills you care to add to it. While it's a bit big for the backpack, it makes a nice radio for those of us who prefer little kits that can be tinkered with. You just don't do that with a \$1500 ricebox.

Standard Disclaimer: I'm just a happy customer.

I'm home.
Life is good.
QRP-L #1464

Date: Tue, 18 Aug 1998 18:41:49 -0700
From: Allan Taylor K7GT <k7gt@qsl.net>
To: qrp-l@Lehigh.EDU
Subject: [17844] Fall QRP field event?
Message-ID: <35DA2D5D.7100@qsl.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Wasn't there supposed to be a fall QRP field day event in September??

I have a note somewhere that it was 19 Sept but can't find any more info on it than that. Timeframe?

If it is still on, it will coincide with the long-heralded Yosemite QRP adventure: just me, an old man hiking buddy, and all those Yosemite bears and mosquitoes.

--
73 de K7GT
Allan Taylor (a.k.a. Grant) Pleasanton CA
email: k7gt@qsl.net
web page: <http://www.qsl.net/k7gt/index.html>

Date: Tue, 18 Aug 1998 21:02:56 -0500
From: nilsbull@juno.com (Nils R Young)
To: QRP-L@Lehigh.EDU
Subject: [17845] More antena tenner & Z-match meandering stuff
Message-ID: <19980818.210306.10142.2.nilsbull@juno.com>

Gang,

When they finally haul me off to the home for the nominally continent but clinically moose brained (and I don't wanna hear from you moose brained people now, hear?), I'm gonna blame it all on YOU!

Everybody has to have a specialty. Mine is building millions of copies of one kind of antenna tuner until I end up with all the parts for one perfect one in a million boxes. That's what's happening here, see?

I got started on this Z-match deal 'cause of Pete Hoover's article in QQ for July 98. That got me thinkin' about the Ten Tec Z-match that I had once. And that made me try to build one according to Pete's instructions. Which worked, 'cept for the LED doodad, which I can understand, 'cause I didn't have enough patience to mess with it.

Then I built one on a piece of PVC pipe & put it in a plastic box. But it was too crowded. So I built another one in a large plastic box. Which was ok, 'cept the coil wasn't big enough. So I built another one in another plastic box with a bigger coil. And that one worked ok, 'cept for the output linkage. And the hand capacity effect.

So the last one I added a piece of single-sided circuit board to, grounded the board to the back plane along the side by the capacitor & the coil (one wire each side). Well, that one worked ok, 'cept the coil worked better if there wasn't a ground wire there next to it. So I took out the wire. Then I thought . . .

Why not build one out of circuit board material and leave one side open? And then I thought . . .

Hell, why not build one in a wooden box with metal front & rear and a strap of metal along the side where the capacitor is, so it won't affect the coil? And then I thought . . .

Why not build one with the coil open at the top so I can have little alligators clippin' around in there and have more taps?

So now, as the vodka takes control of my soul & it gets late enough to think about takin' a shower (after playing intermitant mexican field hand out in the yard [which is another story]), I thought . . .

I gotta tell these morons how they've got me on this cycle of antenna tuner experiments again and it's their fault & whatever happens to me tomorrow when the sixteen tons of top soil shows up is their fault and how about them cheese otters? I haven't seen any of them recently! Stupid pacifist badgers from Quebec ran 'em off.

So when I go on the 25th anniversary cruise thing with Cindy (with me

trying to elicit some response to my suggestion that we forego the cruise & spend a week in a beach house outside of Aguada), if I take a radio & an antenna tuner, whatever the antenna tuner will look like by then . . .

It's be YOUR fault!

Are you happy now? Huh? I mean, I've been doin' this antenna dance since I can remember. And when I finally . . .
I said FINALLY . . . get one that kicks butt . . .

Well, you don't wanna know, do YOU!?

73

Nils

. . . the little wooden box with the crocillator clips sure sounds easy.
But all crazy ideas do. Works on paper kinda deal.

Nils R. Bull Young

La Estancia de los Guajolotes Sonrientes :: The Grinnin' Turkey Ranch

WB8IJN &c :: The Tagalong Press :: email to: nilsbull@juno.com

<http://www.geocities.com/Athens/Olympus/9172>

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Or call Juno at (800) 654-JUNO [654-5866]

Date: Tue, 18 Aug 1998 22:00:31 -0400
From: "Beaks" <beaks@westco.net>
To: "qrp-1" <qrp-1@Lehigh.EDU>
Subject: [17846] ZM-2 trouble
Message-ID: <000901bdcb15\$25c10380\$954ef5cd@beaks>
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="-----=_NextPart_000_0006_01BDCAF3.9DF6C1E0"

This is a multi-part message in MIME format.

-----=_NextPart_000_0006_01BDCAF3.9DF6C1E0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Hi folks, been following the discussions of the tuners and need some =
help on the ZM-2 tuner...built it about 2 monthes ago and was doing a =
great job..tuned just about anything I could connect to it =
then..POOF..nothing...the LED SWR indicator shows a match but the =
received sigs are about 20 db down compared to the MFJ tuner and no =
contacts on transmit. Have only used a max of 4 watts on it so wouldnt =
think I had damaged it in any way.=20

About all I can see that could go wrong would be one of the small =
variable caps but how would I know if its bad or not? Where can I get =
replacement variables like these small plastic ones? I sent an email to =
Roy a short time back but see he is recovering now so wont bother those =
good folks for an answer. Anyone got any ideas?

Thanks!=20

Arch N8EAG beaks@westco.net

-----=_NextPart_000_0006_01BDCAF3.9DF6C1E0

Content-Type: text/html;
charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

<!DOCTYPE HTML PUBLIC "-//W3C//DTD W3 HTML//EN">

<HTML>

<HEAD>

<META content=3Dtext/html; charset=3Diso-8859-1 =

http-equiv=3DContent-Type>

<META content=3D'"MSHTML 4.72.3110.7"' name=3DGENERATOR>

</HEAD>

<BODY bgColor=3D#f0f0f0>

<DIV>Hi folks, been following the =
discussions of the=20

tuners and need some help on the ZM-2 tuner...built it about 2 monthes =
ago and=20

was doing a great job..tuned just about anything I could connect to it=20

then..POOF..nothing...the LED SWR indicator shows a match but the =

received sigs=20

are about 20 db down compared to the MFJ tuner and no contacts on =

transmit. Have=20

only used a max of 4 watts on it so wouldnt think I had damaged it in =
any way.=20

</DIV>

<DIV>About all I can see that could go =
wrong would be=20

one of the small variable caps but how would I know if its bad or not? =
Where can=20

I get replacement variables like these small plastic ones? I sent an =
email to=20

Roy a short time back but see he is recovering now so wont bother those =

good=20
folks for an answer. Anyone got any ideas?</DIV>
<DIV>Thanks! </DIV>
<DIV>Arch N8EAG=20
beaks@westco.net</DIV></BODY></HTML>

-----=_NextPart_000_0006_01BDCAF3.9DF6C1E0--

Date: Tue, 18 Aug 1998 22:06:17 EDT
From: we6w@juno.com (Ed Loranger)
To: qrp-l@Lehigh.EDU
Subject: [17847] Zombie Net.
Message-ID: <19980818.185823.8135.1.we6w@juno.com>

You heard it here first!
I was subtle, including it in my signature of my
last post.... But it a'int Friday yet so I'll cut
y'all some slack :)

First there was QRP-L, Now there's
QRP-Z; Midnight nets around your country!

Just when you wanted some Big Z's, all tired at
midnight -- Now you can get some QRP-Z's!

Anyone can start it and call QRPz and exchange
the numbers.

DARN! There's more to this but my
boy wants the phone line for his email...

Zombie #106
-Ed
72, Ed WE6W QRP-Z#106 <http://www.qsl.net/we6w>
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Or call Juno at (800) 654-JUNO [654-5866]

Date: Tue, 18 Aug 1998 22:54:19 -0500
From: k5zty@juno.com
To: mikemo@ibm.net
Cc: qrp-1@Lehigh.EDU
Subject: [17848] Re: Link Coupled Tuners
Message-ID: <19980819.003357.6502.2.k5zty@juno.com>

Mike,
L.B. Cebik is doing a 2 part article on link coupled tuners in QRP
QUARTERLY right now. Part one in April '98 and part two in the current
issue. You'll know everything that there is to know about link coupled
tuners if you learn all L.B. has to say about it.
You are a QRP-ARCI member aren't you??
72,
Bill, K5ZTY
Houston, TX

On Tue, 18 Aug 1998 10:12:54 -0400 mikemo@ibm.net writes:
>Can anyone point me in the direction to find info on this type of
>tuner?
>Theory and schematics. Thanks!
>
>72 de KU4QO Mike Maiorana, Palm Harbor, FL
>
>

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Or call Juno at (800) 654-JUNO [654-5866]

Date: Tue, 18 Aug 1998 22:21:03 EDT
From: RangerSF5@aol.com
To: qrp-1@Lehigh.edu
Subject: [17849] X
Message-ID: <dc2746fa.35da3695@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

UNSUBSCRIBE WA2HOQ BOB LECH

Date: Tue, 18 Aug 1998 22:24:34 EDT
From: Ab7wy@aol.com
To: qrp-1@Lehigh.EDU
Subject: [17850] Re: The PERFECT GROUND?
Message-ID: <56731e8d.35da3764@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

well, im not a technical wiz....it sounded like it would be a great idea. i've always been a dipole guy (cant afford a beam yet), so im still in the dark about vert grounding. so i guess your right, vic. while on the subject of verticals, i have an MFJ groundless "shorty" vertical...it says i "dont need a ground", should i put a good ground system on it? and if so, how would i go about doing that. currently, its packed away in a closet. im a cliffdweller so having an outdoor antenna is not a possibility (bummer....sigh~~*). i do great with my ceiling mounted dipole, so i can imagine what an aluminum sky can do. thanks for the help...this is the best reflector on the net.

73...Adam, AB7WY

Date: Tue, 18 Aug 1998 22:28:30 EDT
From: RangerSF5@aol.com
To: qrp-1@Lehigh.EDU
Subject: [17851] ARK and TAC-1
Message-ID: <b04eac6a.35da384f@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Will be leaving the list so 1 more request
Anyone out there have any ARK or TAC-1 updates or info?MODS?
E mail direct
Bob
WA2HOQ

Date: Tue, 18 Aug 1998 21:53:47 -0500
From: "Robert J. Gobrick" <rgobrick@worldnet.att.net>
To: Serge Bertuzzo <103226.3635@compuserve.com>
Cc: qrp-1@Lehigh.EDU
Subject: [17852] WB2QAP Logger Program

Message-ID: <3.0.32.19980818213206.00ebbf4@postoffice.worldnet.att.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Serge,

Nice to hear from you. Check out a freeware program from Bruce Milne WB2QAP (a QRP ARCI member) called QRPPAL. In that potpourri of qrp programs is a stand alone program called Logger which Bruce wrote for the QRP ARCI contests.

You can download this program direct from the New Jersey QRP Website
<http://www.njqrp.org/>

Anyway it is a simple program but useful even on old DOS machines. Not too many bells and whistles but the price is right..

Cheers 73/72 Bob N0EB

>Does anyone know of a simple contest software that can be used for the upcoming ARCI fall QSO party. I know that TR allows you to configure the software but I wonder if someone has developed a simpler program specifically targetted for some of the more popular QRP type contests?Thanks..

72's

>Serge - VA3SB

Bob Gobrick - Stillwater, MN
Internet: rgobrick@att.net

Date: Tue, 18 Aug 1998 23:11:12 EDT
From: sigcom@juno.com (Stephen M Smith)
To: qrp-l@Lehigh.EDU
Subject: [17853] HB: Isolated pads (islands?)
Message-ID: <19980818.201002.8143.0.sigcom@juno.com>

(What are we calling this construction method, anyway?)

Group,

Passed through the San Fernando Valley today and of course couldn't resist stopping in at All Electronics. Bought one of their nibbler tools for \$10.00 plus tax. Bought two pieces of copper clad board, one .047" thickness and the other .063".

The nibbler cuts through both the .063 (single-sided) and the .047 (double-sided) like a hot knife through soft butter. Pretty slick. Leaves cuttings which can be used to make "islands" for ugly (or is it "ughly"?) construction of HB thingies. Cuttings measure .23" L by .085" W.

So there you go. Catalog #: NCT 1-800-826-5432 \$10.00, cheap.

Usual disclaimer, ymmv, caveat emptor, etc., etc.

73.....Steve, WB6TNL Oxnard, CA QRP-L # 621 NorCal #2065 SCQS # 41
ex-WN6TNL (1967)

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Date: Tue, 18 Aug 1998 22:51:21 -0500
From: "George T. Baker" <w5yr@swbell.net>
To: tahrens@inetport.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17854] Re: ten tec rx
Message-ID: <35DA4BB9.6B8078BA@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Tim and Jerry, don't believe everything that you hear about the PCR-1000 on the various reflectors.

I bought the very first one in this area from Texas Towers nearly a year ago. It has been flawless in performance. For what it is, it does an outstanding job. It lacks the filters and "tough" front end that we have come to expect from our transceivers, but compared with most all scanners it is head and shoulders better, especially on HF. It must have more than a little whip antenna as you would expect for HF, but I can copy European dx stations on 40 and 20 with 10 ft of wire laying on the floor

- it is hot!

Most of the problems have come from guys trying various homebrew control programs that, for one reason or another, seem to be able to corrupt the receiver eeprom and screw up some of the functions. Icom clearly warns that only the supplied software should be used. While I don't agree that that is the best way to handle things, I have refrained from using other software and have had no problems.

Another source of problems has been guys that go in and modify the radio to unblock cellular coverage. It is easy - only requires removing a couple of surface mount resistors and installing a couple of others - but apparently this is sufficiently complicated that some have screwed up the radio, then ICOM either won't fix it under warranty or wants an arm and a leg to restore it. Makes for more bad press that the radio hasn't earned.

I like the radio and use it very frequently to monitor the bands while working at the computer. I mainly got it to use with my laptop while on trips in the motor home. But, I am keeping a very close eye on the TenTec!

72/73, George didit dit
Amateur Radio W5YR, 52 years and counting! 33.2 N 96.6 W EM13RE
QRP-L #1373 QRP ARCI #9583 FISTS #4930 ARS #403 ICQ #16819496
AutoPOWER Systems, Fairview, TX (30 Mi. NE of Dallas) 10-X #11771

Date: Tue, 18 Aug 1998 23:07:57 -0500
From: Tim Ahrens <tahrens@inetport.com>
To: w5yr@swbell.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17855] Re: ten tec rx
Message-ID: <35DA4F9D.46266BA1@inetport.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi George - thanks for the positive response! Since I don't own one, I can only go by what others have posted. I had heard something about 'homebrew' software stuff, & problems (possibly early on) with Win95. Just when will we hams learn to leave stuff alone?! ;-)

My problem with any of the computer radios is that I'm basically a knob kinda guy! Betcha it would be nice with all the memories

tho!

thanks again!

Tim W5FN

George T. Baker wrote:

>
> Tim and Jerry, don't believe everything that you hear about the PCR-1000
> on the various reflectors.
>

Date: Wed, 19 Aug 1998 04:28:44 -0700
From: jerry schnor <jerrylee@cwws.net>
To: joebarb@wilmington.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [17856] Re: Looking for W6EMT
Message-ID: <35DAB6EC.4E91@cwws.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Joseph Trombino jr wrote:

>
> Fellow QRP'ers: I was saddened to hear of W6EMT's (Roy Gregson) illness.
> Does anyone have information regarding the address of the hospital in which
> Roy is staying? Perhaps some QSL cards with notes of encouragement from
> fellow QRP'ers would be appropriate and help in boosting Roy's morale
> during his treatment/recuperation. Just a thought.
>

> Regards, Joe W2KJ
i think this would be nice to do for all qrpers jerry n6ifw nor-cal qrp
club

Date: Tue, 18 Aug 1998 21:44:09 -0700
From: W7LS <w7ls@blarg.net>
To: joebarb@wilmington.net
Cc: qrp-1@Lehigh.EDU
Subject: [17857] Re: Looking for W6EMT
Message-ID: <35DA5819.1D02@blarg.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

I'll look into it and get back. Good idea. 73 de Jim, W7LS

Joseph Trombino jr wrote:

>
> Fellow QRP'ers: I was saddened to hear of W6EMT's (Roy Gregson) illness.
> Does anyone have information regarding the address of the hospital in which
> Roy is staying? Perhaps some QSL cards with notes of encouragement from
> fellow QRP'ers would be appropriate and help in boosting Roy's morale
> during his treatment/recuperation. Just a thought.

>
> Regards, Joe W2KJ

Date: Tue, 18 Aug 1998 21:50:15 -0700
From: W7LS <w7ls@blarg.net>
To: k7gt@qsl.net
Cc: qrp-1@Lehigh.EDU
Subject: [17858] Re: SuperSensitive headphones for backpacking
Message-ID: <35DA5987.77A8@blarg.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Good sleuthing, Allan! I may look into a pair for my SW+, instead of a
current-hungry amplifier. 73 de Jim, W7LS

Allan Taylor K7GT wrote:

>
> With some leads from the gang and a visit to a local shop, I at least
> have model numbers for some very lightweight headphones that have
> sensitivity equal to or better than my home station set. Unfortunately
> I will have to search out some other store as their stock is very low
> currently. The type that looks best is called Vertical In-the-ear
> Headphones, the high end model costing ~\$25 and having 108 dB/mw
> sensitivity. Weight is 0.9 oz and folds up, too. Sony model MDR-A44L.
>
> Now to get a pair!
> --
> 73 de K7GT
> Allan Taylor (a.k.a. Grant) Pleasanton CA
> email: k7gt@qsl.net
> web page: <http://www.qsl.net/k7gt/index.html>

Date: Tue, 18 Aug 1998 22:00:13 -0700
From: Dave Willey <dave@cds1.net>
To: QRP-L <qrp-l@Lehigh.EDU>
Subject: [17859] QRPP "5 Watts from 10 2N2222 Transistors" Questions
Message-ID: <35DA5BDD.1E92@cds1.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi all,

The latest QRPP Magazine has a project that I think would help my HW-8 perform better. It is an 5W add on amp using 10 2N2222's.

Problem is that I I'm kinda stumped on several points. Wonder of the QRP-L group could point me in the right direction.

1. What type of meter is used here. The write-up and the drawing do not tell if it's a micro-amp, volt or the min./max. value of the movement.
2. There is one transformer that I'm not sure about. it is listed as "12 bifilar turns on a FT50-61".

What guage wire?

I'm assuming that "bifilar" is some specific way to wind the wire on the form. But I'm not sure of the specifics. Can someone explain in layman's terms, or point me to where I can find the explanation?

Is a "FT50-61" a company - specific item (what company?), or are there clones that can be substituted? Where/who can they be obtained from? (Or better yet scrounged from?)

(This next part gets semi-long, but I'd like to find out if my thinking is way off base. Transistor theory was a LONG time ago in college!)

Having never really worked with multipule transistors that closely, I obtained (30) 2N2222's from a surplus store and measured the HFE using the transistor tester on my DVM. I decided that I wanted to match the gain of each of the transistors so that I would end up

with 10 that were as close in gain relationship as possible.

Ended up doing a spreadsheet that listed gain values (from lowest to highest) in the first column. Then I worked up a formula (in each of the cells to the right), that in any sequential combination of ten values, (five above and five below any one particular gain value), it listed what the difference was between the minimum and the maximum gain was. Lowest overall combined difference were the ten that I used. (Lowest difference was 16 from minimum to maximum.)

Should I just gone ahead and used the ten highest values instead?

BTW- Overall HFE value of the individual transistors was a low of 49 to a high of 281.

It was a nice mental challenge, but I'm not sure if I was looking for the right data.

Thoughts?

--

To send a reply please remove "NOJUNKMAIL" from the return address, and replace "AT" with "@"

Dave Willey
e-mail: dave AT cds1.net
amateur e-mail: kd6kwm AT cds1.net
amateur packet: KD6KWM@KD6KWM.#NCA.CA.USA.NOAM

--

QRP-L #1567

Date: Wed, 19 Aug 1998 01:00:19 EDT
From: PGSPersEng@aol.com
To: qrp-l@Lehigh.EDU
Subject: [17860] Follow up: L/C Meter II
Message-ID: <865479e0.35da5be4@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

After my post asking for feedback on the AADE L/C Meter II, I got six

responses -- and all *extremely* enthusiastic. One individual even said it outperforms a commercial unit (Wavetek 27XT). Almost everybody said it was probably the second most valuable piece of test equipment they own (#1 going to things such as scopes, meters and the like).

Looks like it's time to start planting ideas with the family...

Thanks to all who responded

Paul, AA1MI

Date: Wed, 19 Aug 1998 00:01:12 -0500
From: "George T. Baker" <w5yr@swbell.net>
To: ARDUJENSKI@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17861] Re: The PERFECT GROUND?
Message-ID: <35DA5C18.AD335044@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

How would the radio waves interact with the buried section of the antenna when it is enclosed by such lossy earthen material? If the radiated waves cannot interact efficiently with the buried image section to create the return currents that would flow in such an image, then how would it work?

Wouldn't it be better to lay out a bunch of highly conductive 33 ft radials around the base of the vertical radiator on or very near the surface of the earth where the radio waves can get to them without any power loss to create return currents to the coax feeder braid?

If that concept would really work, why not bury the entire antenna in the ground - real stealth!

<Socratic mode off>

That is what I do with my 40-meter ground-mounted vertical with 60 radials buried just beneath the surface to keep them out of the way. Works great! I see a driving-point impedance of about 40 ohms per the Autek RF-1: 35-37 ohms of radiation resistance and 3 - 5 ohms of loss resistance.

72/73, George didit dit
Amateur Radio W5YR, 52 years and counting! 33.2 N 96.6 W EM13RE

QRP-L #1373 QRP ARCI #9583 FISTS #4930 ARS #403 ICQ #16819496
AutoPOWER Systems, Fairview, TX (30 Mi. NE of Dallas) 10-X #11771

Date: Wed, 19 Aug 1998 00:09:15 -0500
From: "George T. Baker" <w5yr@swbell.net>
To: RangerSF5@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17862] Re: LQQKing for ED Crowell
Message-ID: <35DA5DFB.11039129@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bob, back in the 70's I had a 23 ft coil-loaded rotary dipole on 40 up about 53 ft that was a real winner. Short antennas can do the job when designed and operated properly, as you have demonstrated. They are a little fussier with narrower bandwidths and a little lower efficiency due to coil losses, but when these are taken into account, they still do a great job. After all, a dipole can be as short as much less than a tenth wavelength and still radiate almost as much power as a full-sized element.

Moxen's book "HF Antennas for All Locations" gives a lot of practical and theoretical information on shortened antennas.

72/73, George didit dit
Amateur Radio W5YR, 52 years and counting! 33.2 N 96.6 W EM13RE
QRP-L #1373 QRP ARCI #9583 FISTS #4930 ARS #403 ICQ #16819496
AutoPOWER Systems, Fairview, TX (30 Mi. NE of Dallas) 10-X #11771

Date: Tue, 18 Aug 1998 22:44:51 -0700
From: Jerry Parker <jparker@fix.net>
To: qrp-l@Lehigh.EDU
Subject: [17863] "CB Slider" by Bruce Muscolino
Message-ID: <2.2.32.19980819054451.00707e24@fix.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

The NorCal Back to the Future Project has
a new feature article on the NorCal Page.

"The CB Slider"

by Bruce Muscolino, W6TOY/3

Check it out,,,Enjoy,,,72,,,Jerry...WA6OWR...K

<http://www.fix.net/norcal.htm>

Date: Wed, 19 Aug 1998 05:39:29 -0700
From: "Harvey D. D. Hetland" <n6mm@earthlink.net>
To: qrp-1@Lehigh.EDU
Subject: [17864] Re: "CB Slider" by Bruce Muscolino
Message-ID: <35DAC781.7F6D@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The correct URL address appears to be:
<http://www.fix.net/~jparkers/norcal/cbslider/cbslider.htm>

73, Harvey, N6MM.

Date: Tue, 18 Aug 1998 23:08:31 -0700
From: "Bill Todd" <bill@willapabay.org>
To: <nwq-1@scn.org>
Cc: <qrp-1@Lehigh.EDU>
Subject: [17865] August "NWQ" Now On Line
Message-ID: <002701bdcb37\$ce371c80\$1c4ffbce@default>
MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="-----_NextPart_000_0024_01BDCAFD.1E24B260"

This is a multi-part message in MIME format.

-----_NextPart_000_0024_01BDCAFD.1E24B260
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Greetings QRPers -=20

The August "NWQ" Newsletter, from the NorthWest QRP Club is finally on =
line. You can view the "Graphic Quality" version of the newsletter by =
going to the web page listed at the bottom of this message. Our "Simple =
HTML" newsletter should appear on our official NW QRP Club page shortly.

This month's issue was a bit late due to some computer problems I had in =
July and Early August. Hopefully, succeeding issues will not suffer the =
same fate (fingers crossed here...).

This issue includes;

1. The NW QRP Club's ARRL Field Day report
2. An analysis of the latest FCC plans to =
streamline the Amateur Service
3. A QRO's conversion to QRP
4. Our regular DX column from Ward, N0AX -=20
Featuring a discussion of the current =
solar cycle
5. K7SY's explanation of the WWV flux & Index =
report (an oldie but a goodie)
6. Our NEW 75 meter SSB Net & NWQ-L archives =
enhancements
7. Details of the September NW QRP Club =
"NERDS" Contest

And, a few more surprises to boot.

I hope you enjoy the newsletter - and as always, your suggestions and =
comments are welcome.

CUL, Bill-N7MFB

"NWQ" Newsletter Editor

=20

<http://www.willapabay.org/~bill>

ICQ me @ 8926298

-----=_NextPart_000_0024_01BDCAFD.1E24B260

Content-Type: text/html;

charset="iso-8859-1"

Content-Transfer-Encoding: quoted-printable

<!DOCTYPE HTML PUBLIC "-//W3C//DTD W3 HTML//EN">

<HTML>

<HEAD>

[illegible]

Subject: [17866] Re: HB: Isolated pads (islands?)
Message-ID: <Pine.SOL.3.91.980819002059.26602E-100000@zia>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Tue, 18 Aug 1998, Stephen M Smith wrote:

> Bought one of their nibbler tools for \$10.00 plus tax.
>
> The nibbler cuts through both the .063 (single-sided) and the .047
> (double-sided) like a hot knife through soft butter. Pretty slick.

> 73.....Steve, WB6TNL Oxnard, CA QRP-L # 621 NorCal #2065 SCQS # 41

I have accumulated a bunch of tools and gadgets over the years, but must admit, there are a few you wonder how you ever got along without one ... and a nibbler tool is at the top of the list. For cutting square cut-outs and slots in aluminum, it's the only way to go. And of course great for copper clad shaping, or making the Jim Kortge memorial 2N2 pads.

A few other gadgets that have paid for themselves in my shop:

1. Set of drills and taps for 2-56, 4-40 and 6-32
2. Graduated drill bit (for expanding a small hole up to 1/2 inch in small steps for switches, BNC's, etc.)
3. Set of jeweler files (round, square and triangle shaped)
4. Hot glue gun
5. Pair of sissors (great for reaming out a hole, but don't tell xyl!)
6. Small penlight flashlight
7. Rubidium beam deep etch engraving laser (hey, I'm kidding!)

Radio Shack has a few of these things, if you don't have some tool discount center thing down the street.

72, Paul NA5N

Date: Wed, 19 Aug 1998 02:39:39 EDT
From: ARDUJENSKI@aol.com
To: w5yr@swbell.net, owner-qrp-1@Lehigh.EDU, qrp-1@Lehigh.EDU
Subject: [17867] Re: The PERFECT GROUND?
Message-ID: <148b53fb.35da732c@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

George,

Don't really know how to respond to question. I thought the *ground* was suppose to complete the other half of the 1/4 wave and therefore thought that the putting a 1/4 wave good conductor down might be a possibility in lieu of 60 to 120 radials.

There is also the other part that neither this method nor the radials will help is that the ground condition affect the take-off angle. The ground out to 3 wavelengths affects this aspect.

Maybe it has to do with the ground affect needs to be near the surface as you say. All the articles I read always talked about several 8ft ground stakes or several radials but none addressed a deep conducting pipe...so was just curious as to the reason no used much.

TNX for feedback

Alan KB7MBI

Date: Wed, 19 Aug 1998 02:41:31 EDT
From: Ab7wy@aol.com
To: qrp-1@Lehigh.EDU
Subject: [17868] Re: The PERFECT GROUND?
Message-ID: <f81d7b00.35da739c@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

ok, so a 33 foot copper pipe wouldnt be a good idea...if i had read a little more clearly i would have deducted that. i guess what i was focusing more on was a 33 foot ground rod for ANY system...not just verticals, i realized how goofy my reply was right after i sent it :-). i just saw a glittery wagon go by and i figured i would jump on and go for a ride...got a little bumpy. ok fellas, i'll crawl back into my hole now.

73....Adam, AB7WY
extra....cant you tell? <G>

Date: Wed, 19 Aug 1998 07:46:48 +0100
From: Stephen John Farthing <stephen@stevef.demon.co.uk>
To: qrp-1@Lehigh.EDU

Subject: [17869] Re: New ADI DDS chip
Message-ID: <uaqHNGAYTn21EwJd@stevef.demon.co.uk>
MIME-Version: 1.0

In article <xDxYGJAagW21Ew7+@1fheller.demon.co.uk>, Leon Heller
<leon@1fheller.demon.co.uk> writes

>ADI has data on a new DDS chip, the AD9851, on their web site.

>

>It has a clock input of 175 MHz max., so should be good for up to about
>60 MHz output. Unlike the AD9850 that some of us have been experimenting
>with, it has a 6X internal reference clock multiplier, so will only
>require a 55 MHz clock input for max. frequency operation. It comes in
>the same 28-pin SSOP package as the AD9850, and I will therefore be able
>to use my SMD adaptor with it, when they become available.

>

>Leon

For those of us using the AD9850 Electrovalue stock canned 120MHz osc
modules in the UK. I think they cost 7 quid.

I wonder if we could put together a bulk purchase of the AD9851,
preferably mounted on the SMD Adaptor. Having pre mounted AD9850s (which
Leon supplied) made them easier to work with.

BTW our project to drive a KK7B R2T2 combination using 2 DDS chips
driven by a PIC is going well. Hopefully we will have a complete
prototype by XMAS (at the moment we have a working single band RX).

73

--

Stephen John Farthing MBCS G0XAR
Melksham, Wiltshire UK
RSGB G-QRP 7766

Date: Wed, 19 Aug 1998 00:14:57 -0700
From: W7LS <w7ls@blarg.net>
To: qrp-1@Lehigh.EDU
Subject: [17870] Info on Roy Gregson (Emtech)
Message-ID: <35DA7B71.E83@blarg.net>
MIME-Version: 1.0
Content-Type: multipart/mixed; boundary="-----1BCD668869C6"

This is a multi-part message in MIME format.

-----1BCD668869C6
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Gang: Here is a note from Roy's daughter, Suzi:

-----1BCD668869C6

Content-Type: message/rfc822

Content-Transfer-Encoding: 7bit

Content-Disposition: inline

Received: from animal.blarg.net for w7ls

with Cubic Circle's cucipop (v1.14 1997/04/11) Wed Aug 19 00:09:56 1998

X-From_: ROYGREGSON@aol.com Tue Aug 18 22:55:08 1998

Return-Path: <ROYGREGSON@aol.com>

Received: from imo27.mx.aol.com (imo27.mx.aol.com [198.81.17.71])

by animal.blarg.net (8.8.5/8.8.4) with ESMTP

id WAA14388 for <w7ls@blarg.net>; Tue, 18 Aug 1998 22:55:08 -0700

From: ROYGREGSON@aol.com

Received: from ROYGREGSON@aol.com

by imo27.mx.aol.com (IM0v14_b1.1) id 9QMPa04229

for <w7ls@blarg.net>; Wed, 19 Aug 1998 01:54:25 -0400 (EDT)

Message-ID: <ab2c77fc.35da6892@aol.com>

Date: Wed, 19 Aug 1998 01:54:25 EDT

To: w7ls@blarg.net

Mime-Version: 1.0

Subject: Re: Looking for W6EMT

Content-type: text/plain; charset=US-ASCII

Content-transfer-encoding: 7bit

X-Mailer: AOL 3.0 16-bit for Windows sub 38

X-Mozilla-Status: 0011

Hello,

I am Suzi, Roy's oldest daughter. My Dad is in Harrison Hospital, here in Bremerton, in the Critical Care Unit. He is not able to accept phone calls at this time, however, you can call and inquire regarding his progress. The number is 800-281-4024. The address is 2520 Cherry Ave, Bremerton, WA.

I will check his e-mail daily and try to respond to as many as possible. We thank you very much for your concern for my Dad. I will keep you posted.

Again, thank you very much!

Suzi Gregson

-----1BCD668869C6--

Date: Wed, 19 Aug 1998 07:04:25 +0100

From: Leon Heller <leon@lfheller.demon.co.uk>
To: dave@cds1.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [17871] Re: QRPp "5 Watts from 10 2N2222 Transistors" Questions
Message-ID: <6DNaGKAprm21Ewbo@lfheller.demon.co.uk>
MIME-Version: 1.0

In message <35DA5BDD.1E92@cds1.net>, Dave Willey <dave@cds1.net> writes

[deleted]

>
>2. There is one transformer that I'm not sure about. it is
>listed as "12 bifilar turns on a FT50-61".
>
> What guage wire?

This sounds like a broadband transmission line transformer, so the gauge isn't critical. I use 0.28 mm enamelled wire for this type of transformer.

>
> I'm assuming that "bifilar" is some specific way to wind
> the wire on the form. But I'm not sure of the specifics.
> Can someone explain in layman's terms, or point me to
> where I can find the explanation?

"Bifilar" just means two windings put on at the same time, so the two wires are close together. This constitutes the transmission line, which should have an impedance of about 100 ohms. The easiest way to do it is to simply twist the wires together - about 10 twists per inch should be about right. It isn't critical.

>
> Is a "FT50-61" a company - specific item (what company?),
> or are there clones that can be substituted? Where/who
> can they be obtained from? (Or better yet scrounged from?)

FT50-61 is an Amidon ferrite toroid, 0.5" dia., 61-type ferrite.

[deleted]

73, Leon

--

Leon Heller: leon@lfheller.demon.co.uk <http://www.lfheller.demon.co.uk>
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See <http://www.lfheller.demon.co.uk/dds.htm> for details of a simple AD9850

DDS system. See " "/diy_dsp.htm for a simple DIY DSP ADSP-2104 system.

Date: Wed, 19 Aug 1998 04:00:11 -0400
From: n2tpa@juno.com (Bill d Lazure)
To: kc5tja@topaz.axisinternet.com
Cc: QRP-L@Lehigh.EDU
Subject: [17872] Re: Very low supply voltage PA circuits
Message-ID: <19980819.041956.7686.1.N2TPA@juno.com>

Sam,

You're assuming that the P.A. device is feeding the load directly. If you could find a 3 volt source capable of GREAT current (Such as a series-parallel arrangement of Ni-Cds), you should be able to take that Low voltage/Hi Current wave at the P.A. and step it up through a transformer to the load.

By your reasoning," We need a voltage, then, of $\sqrt{4 \times 50 \times 5}$, or 31.6V RMS", the 12V that feeds my rigs shouldn't be able to produce even 5 Watts. The key is the tuned circuit after the P.A. With it, you can accomplish an impedance Step-up that effectively transforms the Low Voltage/High current (Low Z) P.A. output to the Higher Voltage/Lower Current (Higher Z) Load.

>, David Feldman wrote:

>> Anyone doing any work on QRP final amp stages that run off very
>> low supply voltages - 3-6 volts ??

> Sam Falvo Wrote:

>Let's assume a 50-ohm load. If my memory serves me correctly,
> $P_o = E^2 / 4Z$. Let's say we want to maintain 5W on a 50 ohm
>load. We need a voltage, then, of $\sqrt{4 \times 50 \times 5}$, or 31.6V RMS. Current

>draw should be roughly 0.632A.

Obviously, a battery of 3V won't be able to pull this off.

Bill Lazure
N2TPA
Syracuse, NY

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Wed, 19 Aug 1998 05:20:48 -0400
From: Joseph Mikuckis <k3chp@erols.com>
To: qrp-1@Lehigh.EDU
Subject: [17873] Re Cut Numbers
Message-ID: <35DA98F0.3710@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

During QRP contests I would sometimes get a report such as "559 AZ 2R8". This business of "2R8" threw me until I figured out that "R" stood for a period! Thus, the contest exchange meant "599 Arizona 2.8 watts."

73/72 de Joe, K3CHP
k3chp@erols.com

Date: Wed, 19 Aug 1998 06:08:23 -0400 (EDT)
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
To: ARDUJENSKI@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [17874] Re: The PERFECT GROUND?
Message-ID: <Pine.GS0.3.96.980819055344.3530B-1000000@larry.cas.utk.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

The idea of drilling down 33' to provide a real component for the so-called image portion of a 1/4 wl vertical is interesting.

The idea has this merit: it provides an excellent ground for all manner of atmospheric ionization. In other words, it is a good ground rod for lightning, etc.

So far as completing the vertical goes, it is likely a waste of energy. Even at low HF, all reflection occurs within a few feet of the surface. A ground plane, either just sub-soil or elevated, controls the penetration by providing antenna completion at the surface. This reduces losses involved in the antenna completion function.

The concept of an image antenna is hypothetical only, used to calculate the properties of vertical "monopoles," since the monopole without either a ground plane or an image is incomplete. For example, if you can model the ground plane, you do not need the image concept to perform all calculations.

If you were to drill the 33' hole for the tube and if you could measure rf along it and in the soil around the antenna, you would find virtually all the energy in the soil at or near the surface and virtually none down deeper along the buried pipe. About the only condition I can imagine in which this would not be so is if you lived in an area of pure silicon sand without metallic content to a depth of 35' or so. Some desert hams have noticed that when dry, their antenna's act like they are higher (farther from ground) than when it is raining. Of course, rain dissolves some of the metallic salts, making the impure sandy ground more conductive at the surface, while dry means that most metallic ions are locked up in salts.

Other than that, the ground plane--buried or elevated--seems cheaper, less energy intensive, and more effective for vertical antennas.

-73-

LB, W4RNL

Date: Wed, 19 Aug 1998 07:21:38 -0400
From: Greg Weinfurtner <gweinfurt1@ohiou.edu>
To: Ab7wy@aol.com, qrp-1@Lehigh.EDU
Subject: [17875] Glittery wagon!
Message-ID: <v03110700b20063d21d0f@[132.235.81.22]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

i just saw a glittery wagon go
>by and i figured i would jump on and go for a ride...got a little bumpy. ok
>fellas, i'll crawl back into my hole now.
>
> 73....Adam, AB7WY
> extra....cant you tell? <G>

Adam,

No doubt you've seen others on that "glittery wagon?" That has been me in the past and will be me in the future too! It's those quick thoughts, ideas, or moments of inspiration that have brought about great inventions, so keep that "spark" going! This QRP list has been an education for me and many others, so don't crawl in the hole, jump up and join the rest of us fellow travelers.

By the way, I really got a kick out of the "glittery wagon" analogy; well put! You said more in one sentence than you know...

Thanks for the lift Adam, 72 de NS80

```
***** Amateur Radio *****
*                                     <><                                     *
*      NN      N SSSSSSS 8888888 0000000 Greg Weinfurtner                *
*      N N      N S      8      8 0      0 9411 Kitty Ln.                *
*      N N      N SSSSSSS 8888888 0      0 Athens, Ohio 45701           *
*      N N      N S      8      8 0      0 U.S.A. EM89WH                *
*      N      NN SSSSSSS 8888888 0000000 DXCC WAS                        *
*                                                                              *
*      "Can thou send forth lightnings that they may go and say         *
*          unto thee, 'Here we are'?" Job 38:35                          *
*                                                                              *
*          ns8o@qsl.net                                                    *
*          http://www.qsl.net/ns8o/index.html                            *
*          http://ouvaxa.cats.ohiou.edu/~weinfurtner                      *
*****
```

Date: Wed, 19 Aug 1998 07:12:33 -0400
From: mikemo@ibm.net
To: kd1jv@moose.ncia.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [17876] Re: New ADI DDS chip
Message-ID: <35DAB321.605E@ibm.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

> >ADI has data on a new DDS chip, the AD9851, on their web site.
> >It has a clock input of 175 MHz max., so should be good for up to about
> >60 MHz output.

How about the "old" AD9832. Doesn't go as high in frequency, but it is small and cheap. Good for QRP VFO????

I've got a couple, I'm just trying to figure out how to solder those tiny leads.

72 de ku4qo Mike Maiorana, Palm Harbor, FL

Date: Wed, 19 Aug 1998 08:18:37 -0400
From: Michael Neverdosky <MichaelN@cycat.com>
To: qrp-l mailing list <qrp-l@Lehigh.EDU>
Subject: [17877] Re: The PERFECT GROUND?
Message-ID: <35DAC29D.F3BBCA28@cycat.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

First you want to think about what you want the ground for.
Is it a counterpois for the antenna"
Is it for lightning protection.
Other?

A company that does lightning protection here in central Florida drives copper-clad steel ground rods (with a pneumatic hammer) until they get a low resistance ground.

Usually this is a 5 ohm ground by the 'fall of potential' method. Often they the rod to a depth of 100-200 feet to get this good of a ground.

With this good of a ground the majority of a lightning strike goes deep into the earth and doesn't wander around the surface zapping lots of stuff.

For these lightning grounds all connections are either bolted or welded.

To protect against lighting a deep single ground rod is very good. Some people will argue this, but these guys have a very good record of installations where equipment was regularly getting fried by every strike before the deep ground was installed, to very rarely having any lightning damage. Remember there is more to the lightning protection system than just the ground. It must be a complete system.

Now to enhance the RF performance, lots of radials and short ground rods are likely to be much better.

michael N6CHV (in central FL)

ARDUJENSKI@aol.com wrote:

>

> Has anyone come across an article about the merits of drilling down say 33 ft
> and inserting a copper pipe to act as the ground side for a vertical,

Date: Wed, 19 Aug 1998 07:47:53 -0500 (CDT)
From: ac5ez@webtv.net (Larry B)
To: qrp-1@Lehigh.EDU
Subject: [17878] mfj 9040
Message-ID: <8752-35DAC979-398@mailtod-122.bryant.webtv.net>
Content-Type: Text/Plain; Charset=US-ASCII
Content-Transfer-Encoding: 7Bit
MIME-Version: 1.0 (WebTV)

Finally powered up the mfj 9040 with a 7amphr battery and answered a cq. Nice qso with a qro sta in Wis for 1/2 hr on 7040 khz. Forgot to retune the tuned doublet from 7190 down to 7040 so swr was 3:1 at least, no matter, nice chat, good qso. The rig works.
Ac5ez

Date: Wed, 19 Aug 1998 09:42:09 EDT
From: NoesisDG@aol.com
To: qrp-1@Lehigh.EDU
Subject: [17879] L/C Meter II from AADE
Message-ID: <2d02dda8.35dad632@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

>>I'm thinking of getting an LC meter.
>>Could those people who have the L/C Meter II from AADE tell me how satisfied
>>they are with the instrument? What do they like best and worst? Are the
>>ranges sufficient? How does this instrument stack up to, say, the Wavetek
>>27XT?
>>Thanks,
>>Paul, AA1MI

Hi Paul:

I bought an L/C Meter II about a year ago and remember putting it together in just a few hours. Most of the difficulty I had with the kit was the mechanical mounting of the circuit board, but that was because I couldn't read instructions that day. A call the AADE gave me quick assistance and he didn't even get mad when I told him his manual was wrong when it wasn't. I finally saw the light and got the case together.

I find the ranges on the meter very adequate for all AF/RF circuit needs. The ability to "null out" stray capacitance/inductance from the test leads when measuring small values of C and L. It is especially good for matching component values as it has a special mode for this, good for sorting junk box parts too.

No complaints overall with the meter, other than I would like a slightly larger LCD display with a little more contrast, but what AADE provides does the job. I do have a Wavetech 27XL as well and the AADE L/C Meter II is FAR superior when it comes to LC measurements.

All the usual disclaimers about connections with. Just a satisfied customer.

Hope that helps.

72,

Dave
KB2TQX

=====
"My QTH is a Kilowatt-free zone."

Keep
Bonding
2
The
QRP
eXperience

=====

Date: Wed, 19 Aug 1998 09:43:29 EDT
From: ARDUJENSKI@aol.com
To: qrp-1@Lehigh.EDU
Subject: [17880] TNX ON GRND COMMENTS
Message-ID: <2d02dc2c.35dad682@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Thanks for all those who helped clarify that there are two purposes for ground. More importantly it was explained that the references in texts that discuss the ground mirroring the other half of a 1/4 wave did not really note that RF stayed near the surface i.e. the use of radials. One would have thought other wise since swamp lands and being near large bodies of water

would normally seem to indicate that the depth of the ground was important.
Just goes to show there are more complex answers to simple questions...thanks
again to all those who took time to respond. Alan KB7MBI

Date: Wed, 19 Aug 1998 08:53:32 -0500
From: "ukii" <ukii@megsinet.net>
To: "qrp-l" <qrp-l@Lehigh.EDU>
Subject: [17881] Zombie numbers ???
Message-ID: <004001bdcb78\$c68411a0\$0eaf51d1@ns1.megsinet.net>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hello Gang...
Ok,so I have been neglecting the list,forgive me!
I promise to pay closer attention in the future! (still remodeling)
Anyway,please,can someone tell me how/who/where to get this Zombie number? I
"thought" I sent a message to someone a while
back,but maybe I didnt...
I wanna beat the rush before Halloween... (after i am a zombie,cant rush!)
Thanks Much
73 de john
n9ukx

Date: Wed, 19 Aug 1998 10:19:20 -0400
From: Tracy@bytemark.com (Tracy)
To: "QRP-L" <qrp-l@Lehigh.EDU>, <dave@cds1.net>
Subject: [17882] RE: QRPp "5 Watts from 10 2N2222 Transistors" Questions
Message-ID: <000f01bdcb7c\$5b130bc0\$30751ad1@titan>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Dave --

> 2. There is one transformer that I'm not sure about. it is
> listed as "12 bifilar turns on a FT50-61".
>

> What gauge wire?

The largest gauge possible without going to multiple layer windings. The most important point when winding any toroid is how many times the wire passes through the center, which constitutes a 'turn.'

>

> I'm assuming that "bifilar" is some specific way to wind

> the wire on the form. But I'm not sure of the specifics.

> Can someone explain in layman's terms, or point me to

> where I can find the explanation?

Bifilar means two wires in parallel. Generally a bifilar transformer uses two wires, sometimes twisted or side-by-side, to make the transformer.

Twisting the conductors before winding increases the inter-winding capacitance and can increase coupling in certain applications.

The ends of the first wire are numbered one and two, and the ends of the second wire are numbered 3 and 4. I haven't seen the schematic of the circuit you are working with, but many times the device is connected to form a 'center tapped' type arrangement by connecting ends 2 and 3, making a coil that seems to go all the way around the core, and then go around again with the other conductor.

>

> Is a "FT50-61" a company - specific item (what company?),

> or are there clones that can be substituted? Where/who

> can they be obtained from? (Or better yet scrounged from?)

An FT50-61 is a toroidal core that measures .5" OD and is manufactured with a material referenced as '#61.' These are available from Amidon through ByteMark, of course ... ;)

Reference our web site <http://www.bytemark.com/amidon> for hundreds of pages of technical information regarding toroidal cores, their material and how to determine number of turns, wire size, etc. QRP-L members get a 10% discount on Amidon parts if ordered through ByteMark.

There is a table (the exact url escapes me, sri) that gives you a maximum number of turns for a given wire size on a given core. This table defines a full single layer winding, so figure about 10% less to allow a 30 degree angle from the winds on your core.

If you have any other questions, please feel free to drop me a line. I love this stuff ... I just wound a few bifilar transformers on some FT37-43 cores last night for a few broadband mixer amps I'm making for my computer radio. So much fun!!!

N4LGH QRP-L #1453

Tracy Markham

ByteMark / Amidon

www.bytemark.com/amidon

tracy@bytemark.com

800 679-3184

Date: Tue, 18 Aug 1998 18:07:35 +0000
From: Bob Hightower <ki7mn@dancris.com>
To: we6w@juno.com
Cc: qrp-1@Lehigh.EDU
Subject: [17883] Re: Bands Dead?; 73 KHz band; what to do?
Message-ID: <Version.32.19980818180549.01076c90@mail.dancris.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 08:52 PM 8/18/98 -0400, you wrote:

>
>Now I hear Juno won't work on Windows <95???
>Future releases being forced on us? Geez, I hope
>we survive. Of course all this is hearsay until
>I see it myself....
>

It will work on Win95, but maybe not on Win98...haven't bit on that one yet. My xyl (N7XJW) uses it with Win95 when, for some reason, her server will not accept mail from certain lists.

Date: Wed, 19 Aug 1998 07:45:40 -0700
From: Vic Rosenthal <rakefet@rakefet.com>
To: k3chp@erols.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [17884] Re: Re Cut Numbers
Message-ID: <35DAE514.F0508C71@rakefet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Joseph Mikuckis wrote:

>
> This business of "2R8" threw me until I figured out that "R" stood
> for a period!

Actually, R is standard CW usage for a DECIMAL POINT, not a period. For example (somewhat contrived) what if you wanted to say "the quake measured Richter 7. 3

people were injured." That would be ambiguous if you didn't distinguish between a period and decimal point.

Vic, K2VC0

Date: Wed, 19 Aug 1998 09:54:55
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-1@Lehigh.EDU
Subject: [17885] 11-2-10 project, update
Message-ID: <3.0.3.16.19980819095455.2f8f97a0@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Howdy Gang,

Ahhh, progress!

Almost two weeks ago, I made up the new conversion board and was disappointed in the amount of noise it made in the receiver. I thought I had that problem under control, but when I went from a double sided board to a single sided one, the noise went from marginally acceptable to not very good. At the time, I couldn't find a way to quiet it down, so put it aside and hoped I'd find a solution later.

Last night I got back to it and solved the problem! Turns out the cpu was the problem, running at 10.24 Mhz. I slowed the clock waaaaay down to something like 38 Khz and virtually all the noise went away. Of course, that meant going and changing all the software timed functions, but it is now working like a champ!

So, I just need to incorporate a place for a cpu xtal on the board and we can get into the next phase.

(For those with short memories, this is a conversion board to make a Maxon CBM30 into a 10 meter AM qrp rig)

72,
Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Wed, 19 Aug 1998 08:16:44 -0700

From: Allan Taylor K7GT <k7gt@qsl.net>
To: qrp-1@Lehigh.EDU
Subject: [17886] Re: SST/40 bandwidth issues
Message-ID: <35DAEC5C.3E23@qsl.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I hadn't thought the responses to my SST bandwidth query merited posting ... but I was wrong! The three suggestions I have received were:

- 1) put in a bigger reactor (I assume that means a bigger inductance, but not completely sure). This approach tends to unstable freq, tho.
 - 2) Put both varacter diodes in (apparently two were supplied with the SST) with a switch allowing selecting which one to use.
 - 3) Parallel two xtals (yes, identical freq) and a slightly wider range is attainable. See Super-VX0 on the web, 7L4? and G3YCC.
- 3A) Put in two different crystals, switch between them.

I intend to implement 2 in a test jig and if it isn't sufficient, try 3A.

--

73 de K7GT
Allan Taylor (a.k.a. Grant) Pleasanton CA
email: k7gt@qsl.net
web page: <http://www.qsl.net/k7gt/index.html>

Date: Wed, 19 Aug 1998 12:26:14 -0700
From: "Doug Hauff" <slmachco@fix.net>
To: <qrp-1@Lehigh.EDU>
Subject: [17887] Zombie Shirt Alert
Message-ID: <199808191522.IAA19562@fletch.fix.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

They are here! Jerry Parker <jparker@fix.net> has the new 2-color NorCal Zombie T-shirts! Obviously required for the chic Pacificon ensemble! 72
Doug Hauff KE6RIE

Date: Wed, 19 Aug 1998 10:24:43 -0500
From: "George T. Baker" <w5yr@swbell.net>
To: whalen@SWCP.COM
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [17888] Re: ICQ-QRP
Message-ID: <35DAEE3B.466274C4@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

And let me add my questions:

I have downloaded and installed the ICQ software and gotten a number, etc. but how do I go about getting in on a QRP group chat? Do you just call up someone on the ICQ "qrp" list and hope or what? Does anyone act as a "net control" and call up a group for a chat-room go at it?

What are the procedures? who is doing what to whom? Other than Clinton .
. .

72/73, George didit dit
Amateur Radio W5YR, 52 years and counting! 33.2 N 96.6 W EM13RE
QRP-L #1373 QRP ARCI #9583 FISTS #4930 ARS #403 ICQ #16819496
AutoPOWER Systems, Fairview, TX (30 Mi. NE of Dallas) 10-X #11771

tom whalen wrote:

>
> Hello QRPer's!
>
> Someone posted a list of the ICQ users that are also QRPer's. Would like
> to see it again if you dont mind. I now have Jim AL7FS in my ICQ address
> file. Can't work em on hf, so work em on ICQ!! 72, Tom
> WB5QYT/Albuquerque

--
72/73, George didit dit
Amateur Radio W5YR, 52 years and counting! 33.2 N 96.6 W EM13RE
QRP-L #1373 QRP ARCI #9583 FISTS #4930 ARS #403 ICQ #16819496
AutoPOWER Systems, Fairview, TX (30 Mi. NE of Dallas) 10-X #11771

Date: Wed, 19 Aug 1998 11:26:55 EDT
From: PDouglas12@aol.com
To: sigcom@Juno.com, qrp-1@Lehigh.EDU
Subject: [17889] HB: Isolated pads (islands?)= "Paddyboard"
Message-ID: <54f10d55.35daeec1@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Stephen and the Gang,

Drew, VK3? has a book out there (I think it is called Homebrew Projects for Hams, but I am writing this from the office, so I can't look to see the exact title) The book is sold through the G-QRP club; it is a terrific homebrewers project book. His circuits are all set up for construction via isolated pads (glued or soldered to a pc substrate). He discusses this variation on the "ugly" method of building at length, and calls it "paddyboard" construction. I propose we adopt this nomenclature. Also, his method of illustrating construction of Paddyboard circuit construction is easy to follow and understand. I tried laying out a circuit by hand with this method, and it seems a great way to go. If you want to see a beautiful execution of paddyboard/ugly construction (oh my, was that an oxymoron?) just look at Paul Harden's illustrations of such construction in QRPP.

72,
Preston WJ2V New York

Date: Wed, 19 Aug 1998 10:40:59 -0500
From: "Kevin Muenzler WB5RUE" <wb5rue@stic.net>
To: "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [17890] VLF Receiver
Message-ID: <19980819154101551.AAA205@muenzlerk>

Several days (or weeks) ago someone posted a schematic for a VLF (.1 - 12kc) receiver. Can someone perhaps point me to it.....

Kevin, WB5RUE

Date: 19 Aug 1998 11:40:24 -0400
From: Glen Leinweber <leinwebe@mcmail.cis.McMaster.CA>

To: w7ls@blarg.net
Cc: qrp-1;;
Subject: [17891] Re: SuperSensitive headphones for backpacking portable
Message-ID: <1998Aug19.114024-0400@[130.113.234.7]>

In <35D9C3E6.453D@blarg.net>, W7LS wrote:

>Allan, et al:

> I did a search of the local discount drugstore and found the most
>sensitive headcans are the Sony sumarium cobalt jobs. Look on the back of
>the package for the specs. You should see 102 dB/mW for the good ones.

Be careful of these specs! I'm not suggesting they're lying, but they're not telling the whole truth either...

Notice that they spec sound pressure levels referred to input POWER. Look carefully at the headphone IMPEDANCE. I've got some of these high-efficiency phones and discovered that they're no louder than some old 8-ohm phones. Turns out they're 64 ohms.

So the extra dBs are used to load the audio amplifier less, to produce the same sound pressure levels. Great for reducing battery drain, so for portable use, they're worthwhile. Just don't expect "more sensitive" phones to mean "louder".

Date: Wed, 19 Aug 1998 10:53:22 -0500
From: Bill Schiller <schiller@cherokee.nsuok.edu>
To: qrp-1@Lehigh.EDU
Subject: [17892] FS QRP++
Message-ID: <35DAF4F2.33C14746@cherokee.nsuok.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I'm selling my QRP+ #377. It has been fully factory upgraded to ++ status, has the most recent eproms etc. It includes the factory supplied mic. and I have the entire set of modification articles by Larry East. It is in excellent operating and cosmetic condition, and has only been used at my home QTH. I'm asking \$425 for all and I will pay shipping to the lower 48 states.
Bill Schiller KJ5CI

Date: Wed, 19 Aug 1998 08:52:58 -0700 (MST)
From: flydnq7x@primenet.com (Floyd Smithberg)
To: pharden@aoc.nrao.edu, qrp-1@Lehigh.EDU
Subject: [17893] Re: HB: Isolated pads (islands?)
Message-ID: <199808191552.IAA05026@smtp04.primenet.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>

>A few other gadgets that have paid for themselves in my shop:
>1. Set of drills and taps for 2-56, 4-40 and 6-32
>2. Graduated drill bit (for expanding a small hole up to 1/2 inch
> in small steps for switches, BNC's, etc.)
>3. Set of jeweler files (round, square and triangle shaped)
>4. Hot glue gun
>5. Pair of sissors (great for reaming out a hole, but don't tell xyl!)
>6. Small penlight flashlight
>7. Rubidium beam deep etch engraving laser (hey, I'm kidding!)

I couldn't get along without my.....

>8. Jewelers eye loupe...2X to 5X.
>9. Jewelers tweezers.
>10. Dentists pick/scraper.
>11. Desoldering iron...R/S 64-2060
>12. Tapered reamer....1/4 to 1/2"
>13. Tapered pipe reamer for 1/2 to 1 1/2" hole stretching.
>14.and more
73 Floyd NQ7X Phoenix ScQRPion

Date: Wed, 19 Aug 1998 08:57:12 -0700
From: Allan Taylor K7GT <k7gt@qsl.net>
To: qrp-1@Lehigh.EDU
Subject: [17894] Re: SuperSensitive headphones for backpacking
Message-ID: <35DAF5D8.D30@qsl.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Yeah, I noticed that the impedance was not 8 ohms on any of them!
Actually, the
Sony ones I found to be most interesting have an impedance of 16 ohms
and a
sensitivity of 108 dB/mW. Weigh 0.9 oz. My point of reference is the
Sony

Studio Monitor headphones with impedance of either 24 or 45 ohms (the original box is long trashed and I am using a current Sony catalog page to figure this out) and sensitivity of 106dB/mW. I use that set with my home station and have also used it some in the field. They are light enough, but quite bulky. Also, I don't want to get them trashed with field litter and dust.

So... if life is fair... the super-light ones should be even louder than my point of reference.

--

73 de K7GT
Allan Taylor (a.k.a. Grant) Pleasanton CA
email: k7gt@qsl.net
web page: <http://www.qsl.net/k7gt/index.html>

Date: Wed, 19 Aug 1998 08:41:48 -0600
From: "Ron Smith" <resmith666@uswest.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [17895] Re: Bands Dead?; 73 KHz band; what to do?
Message-ID: <00f901bdcb8d\$73b968c0\$030000004@primenet.com.primenet.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

>It will work on Win95, but maybe not on Win98...haven't bit on that one
>yet. My xyl (N7XJW) uses it with Win95 when, for some reason, her server
>will not accept mail from certain lists.

It also works with Windows 98.

..

Date: Wed, 19 Aug 1998 12:31:30 -0400
From: "James Fielden" <fielden@utkux.utcc.utk.edu>
To: "QRP-L" <qrp-l@Lehigh.EDU>

Subject: [17896] Battery Recharge
Message-ID: <01bdcb8e\$d1e6cb80\$3a12a980@galaxian>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I've been reading all the Battery info and I must be missing something simple. I'm trying to figure out how long to charge my battery.
I have a 12 vdc - 1600 mAH Nickel Cadmium Battery (old bag phone battery)
I have a Class 2 Transformer Output 15 vdc - 300 mA
So I figure 8 hours (Really I just guessed) for a full charge?

73 * Jim, KU4QW
fielden@utkux.utcc.utk.edu
<http://web.utk.edu/~fielden/>

Date: Wed, 19 Aug 1998 19:40:09 +0300
From: Arjen Raateland <Arjen.Raateland@vyh.fi>
To: k7gt@qsl.net
Cc: QRP-L <QRP-L@Lehigh.EDU>
Subject: [17897] Re: SST/40 bandwidth issues
Message-ID: <35DAFFE9.1C71@vyh.fi>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7bit

Allan Taylor K7GT wrote:

> 2) Put both varacter diodes in (apparently two were supplied with the
> SST) with a switch allowing selecting which one to use.
>
> 3A) Put in two different crystals, switch between them.
>
> I intend to implement 2 in a test jig and if it isn't sufficient, try
> 3A.

Allan & gang,

In what now seems ages ago I built a crystal controlled 2 m FM rig and it had 10 channels/Xtals. Some of the Xtals were ground for 20 pF and 32 pF parallel resonance and some for series resonance (abt. 18 MHz). They were switched in a single oscillator circuit using silicon signal diodes (like 1N4148 etc.) as switches controlled by DC from a rotary switch on

the front panel. They were all right on channel.

I think it would be well advised to use diodes as switching devices here, too, and avoid long wires carrying HF signals from oscillator to front panel. For just two similar Xtals it can't a big problem and you don't even have to worry about exact channel frequency.

I probably still have the, hand-drawn, schematic somewhere

73, oh2zaz

--

Arjen Raateland
Finnish Environment Institute
SAS Support
phone +358 9 4030 0350

Date: Wed, 19 Aug 1998 09:36:20 -0700
From: gsurrency@juno.com (Gary L Surrency)
To: ki7mn@dancris.com
Cc: qrp-l@Lehigh.EDU
Subject: [17898] Re: Bands Dead?; 73 KHz band; what to do?
Message-ID: <19980819.094221.10046.0.gsurrency@juno.com>

I'm running Juno ver. 1.49 on Win98 ver. 4.10.98 with no problems. So far, Win98 seems more stable than Win95.

72,

Gary Surrency AB7MY QRP-L #571 Chandler, AZ (near Phoenix)

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Wed, 19 Aug 1998 10:25:50 -0700
From: wager@juno.com (James W. Cates)
To: qrp-l@Lehigh.EDU
Subject: [17899] NorCal 20 kits sold out!
Message-ID: <19980819.102611.4518.0.wager@juno.com>

It is with pleasure that Doug and I can announce that the NorCal 20 kit

run of 500 is sold out, and with regret that it must be said that we can accept no more orders.

Many thanks go to the project team, and more so, to those of you who have made this project possible, assisting hams in less developed countries by your orders. I especially want to thank those of you who sent in additional monies to finance the overseas aspect of the project. I will be writing you as soon as the bookkeeping here is finished.

It is impossible to name all who deserve credit for the success of this endeavor, those who conceived the idea, those who have participated in the various parts of the project, and the 500 of you who have provided the financial base for the third world aspect, by means of your orders.

Five hundred kits ordered in 18 days.

I feel very humble.

jim, WA6GER.

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Wed, 19 Aug 1998 13:36:26 EDT
From: FrConrad@aol.com
To: qrp-1@Lehigh.EDU
Subject: [17900] NERDS and Cut Numbers
Message-ID: <c039017c.35db0d1b@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

To whom...

I'm hoping to work NERDS on September 12 and I just turned down the SW40+ to 900mw in order to get the multiplier. Sending 900mw in the contest exchange sounds like a pain in the neck:

DAHDAHDAHDAHDIT
DAHDAHDAHDAHDAH
DAHDAHDAHDAHDAH
DAHDAH
DITDAHDAH

How about NTTMW instead.

DAHDIT
DAH
DAH
DAHDAH
DITDAHDAH

Works for me!

Think of it as being like trying to figure out a Vanity License Plate as it passes you in the opposite direction at 70 mph.

Pax et Lux,

John+
WB6MFS

P.S. Thanks to the NorthWest QRP folks for putting NERDS on a Saturday.

Date: Wed, 19 Aug 1998 10:30:10 -0700 (PDT)
From: KC5TJA <kc5tja@topaz.axisinternet.com>
To: Bill d Lazure <n2tpa@juno.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17901] Re: Very low supply voltage PA circuits
Message-ID: <Pine.LNX.3.96.980819101016.13637A-100000@topaz.axisinternet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 19 Aug 1998, Bill d Lazure wrote:

> You're assuming that the P.A. device is feeding the load directly.
> If you could find a 3 volt source capable of GREAT current (Such as a
> series-parallel arrangement of Ni-Cds), you should be able to take that
> Low voltage/Hi Current wave at the P.A. and step it up through a
> transformer to the load.

Yes, and this is, in fact, one of my ideas which I did put in the message (the VFO -is- the power supply -- the vfo supplies RF to a suitable step-up transformer, with auxiliary windings feeding other rectifiers to power the rest of the circuit). I saw that technique used in a 1970-genre book on RF circuitry. I no longer have the book, as it all but fell apart. A lot of other good tricks in that book which apparently no one seems to be using as well, but that's a story for another day. I believe

it was used in a pocket FM radio designed to run on a single 1.5V battery.

> By your reasoning," We need a voltage, then, of $\sqrt{4 \times 50 \times 5}$, or
> 31.6V RMS", the 12V that feeds my rigs shouldn't be able to produce even
> 5 Watts. The key is the tuned circuit after the P.A. With it, you can

In another message (dunno if it actually posted, though), I went on to say, after that, that you can use tuned circuits to cut that requirement in half. My VHF handitalkie will NOT put out a full 5W unless I feed it with 16V DC. At 12V, it's more like 3 to 4W. I also remember saying something to this effect (re: class C, D, and E amplifiers), but perhaps I missed putting it in. You can also use lower voltages for greater power output, at the expense of current drain.

HOWEVER, this all assumes a perfect amplifying element. Too low a voltage in a PA could induce distortion, or it just won't amplify. It all depends on the devices you choose for the PA. For CW, 3V is probably fine for a final PA. For SSB, however, I'd rather have 12V, due to the increased linearity it brings. At that point, you NEED a step-up power supply.

(Unless, of course, you know something about low-voltage linearity in amplifiers that I don't; which is quite likely the case. In this case, please do post a follow-up, as I'm interested in the subject. Is someone creating a FAQ for this mailing list?)

```
=====
KC5TJA/6      |                               -| TEAM DOLPHIN |-
DM13          |                               Samuel A. Falvo II
QRP-L #1447   |                               http://www.dolphin.openprojects.net
Oceanside, CA |.....
```

Date: Wed, 19 Aug 1998 10:38:16 -0700 (PDT)
From: KC5TJA <kc5tja@topaz.axisinternet.com>
To: FrConrad@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17902] Re: NERDS and Cut Numbers
Message-ID: <Pine.LNX.3.96.980819103615.13637B-100000@topaz.axisinternet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

> How about NTTMW instead.
>
> DAHDIT
> DAH

> DAH
> DAHDAH
> DITDAHDAH

AAck! If it's one thing about CW that I DO dislike is the truncated numbers. I can never get them right. I start expecting numbers, and get letters -- that just throws me right off track, and I find it hard to start copying again. :-)

```
=====
      KC5TJA/6      |      -| TEAM DOLPHIN |-
      DM13          |      Samuel A. Falvo II
      QRP-L #1447   |      http://www.dolphin.openprojects.net
      Oceanside, CA |.....
```

Date: Wed, 19 Aug 1998 11:05:33 -0700
From: Allan Taylor K7GT <k7gt@qsl.net>
To: qrp-l@Lehigh.EDU
Subject: [17903] Re: Cut numbers
Message-ID: <35DB13ED.23D2@qsl.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Another quickie abbreviation occasionally used on CW is that of an R in place of a period. Unfortunately many QRPers haven't heard of it. In a recent QRP contest, I gave for power 1R5W and got MANY requests for repeats. Naturally I sent 1500MW on the 2nd try. For the few that still didn't get it, I just sent 2W 2W !!

I likewise have tried to use an R in an email address given over the air...limited success here as well. Some getit, some don't. But now you have heard about it so it won't seem so foreign/strange.

k7gt at qsl r net !!

--
73 de K7GT
Allan Taylor (a.k.a. Grant) Pleasanton CA
email: k7gt@qsl.net
web page: http://www.qsl.net/k7gt/index.html

Date: Wed, 19 Aug 1998 12:53:19 -0500
From: Tellefsen Bob-CNSE97 <cnse97@lmpsilo2.comm.mot.com>
To: RangerSF5@aol.com
Cc: QRP-L list <QRP-L@Lehigh.EDU>
Subject: [17904] Re; 20 Meter antenna THAT WORKS
Message-ID: <E726B6D1F2C7D1119AB900805FA74B3CDC3737@s-ilo2-n.comm.mot.com>
MIME-Version: 1.0
Content-Type: text/plain

Bob, another thing you could do for greater convenience in the field. Make the antenna for the low cw end of the band, then if you want to work the high end, just fold back the ends. You could mark the fold points and put a loop there. When the end pieces are folded back against the main antenna, they effectively disappear and the antenna is resonant at the higher frequency.

Then the antenna is always ready to go, and there are no missing pieces or mechanical problems with connections.

73, Bob N6WG

Date: Wed, 19 Aug 1998 14:17:33 EDT
From: ROYGREGSON@aol.com
To: qrp-l@Lehigh.EDU
Subject: [17905] Roy Gregson - W6EMT
Message-ID: <b839b10c.35db16c0@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Dear QRP'ers,

Thank you all for your care and concern regarding my father. He is being transferred today to 4 West, from the Critical Care Unit. We are attempting to answer all mail from his cherished friends and fill all orders from his valued customers. One of the greatest pleasures in Dad's life has been his friends with your group.

We (my brothers and sister) are attempting to keep Dad's business going in his absence and are concerned about some legal issues. If there is an attorney in the group that can answer a few questions for us we would be ever so grateful. We will be checking his e-mail throughout the day.

Again thank you all for all your prayers and concern. We will be sharing all of the e-mail with Dad as soon as he feels up to reading it all.

Sincerely, Suzi Gregson

Date: Wed, 19 Aug 1998 12:26:52 -0600
From: Niel Skousen <skousen@srv.net>
To: qrp-1@Lehigh.EDU
Subject: [17906] K6STI e.mail addr ??
Message-ID: <199808191827.MAA01573@srv.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Anybody have Brian Beesley's (K6STI) e.mail address ?? Can you share it direct (off list) w/ me ??

TNX Niel

Date: Wed, 19 Aug 1998 14:26:16 -0400 (EDT)
From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
To: qrp-1 <qrp-1@Lehigh.EDU>
Subject: [17907] Hey, all!
Message-ID: <Pine.LNX.3.95.980819142341.1047H-100000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Apparently, people are concerned with my NOT being noisy of late. Well, yeah, it's been pretty crazy here and no, I haven't forgotten everyone at all, just working on some REALLY interesting personal things (mostly very good) and am on-air very sporadically.

Sometimes radio MUST take a back seat to life. Good thing to remember.

Damn straight. 72 all and I'm just being quiet for a change...

** Scott Rosenfeld NF3I & AAR3IB/T ** <http://w3eax.umd.edu/~ham> **
** Burtonsville, MD FM19mc * DXCC WAC WAS * QRP-L #147 * AK-QRP **
* Waiting for 6m to open... ** ARRL Life Member/Laurel ARC/UMARA *
** 301-549-1022(h) 301-982-1015(w) *** 35 wpm HF mobile CW Neon **

Date: Wed, 19 Aug 1998 13:31:27 -0500
From: Tellefsen Bob-CNSE97 <cnse97@lmpsil02.comm.mot.com>
To: bmug@gwl.com
Cc: QRP-L list <QRP-L@Lehigh.EDU>
Subject: [17908] Re: Questions - Pauls book
Message-ID: <E726B6D1F2C7D1119AB900805FA74B3CDC378D@s-il02-n.comm.mot.com>
MIME-Version: 1.0
Content-Type: text/plain

Boy, Brad, your questions take me back to my early youth when I was trying to teach myself "radio" from an old Coast Guard electronics book I found. It dated back to WW2.

I'll try for a non-mathematical answer to at least one of your questions.
Let's try the 50 ohms into a pair of capacitors first.

This is the equivalent of a tap directly on the coil, and is used when the coil isn't easily tapped. The purpose is impedance matching. If you think of tapping the coil of a parallel tuned circuit, as you move up from ground the impedance increases. When you find the tapping point that gives 50 ohms, you are there. That would usually be pretty low on the coil, maybe a couple of turns or so.

Now apply this idea to the two capacitors in series across the coil. The bottom capacitor will be much larger than the top capacitor, as it will be the low impedance end of the tuned circuit. The top capacitor has a lower value, and tunes the circuit to resonance. Its value is in series with the lower cap, so the effective capacitance across the coil is a bit lower than the top cap by itself.

If you imagine both caps being variable, you can easily see what is happening. First imagine that both are of equal value. This represents a tap at the center of the coil. For resonance, the series value of the two caps has to be correct for the value of coil you are using. If both caps are fully meshed, the series capacitance is larger, and if they are both unmeshed, the series capacitance will be very small.

In Paul's receiver input example, the NE612 input is 1500 ohms, so the LC tuned circuit impedance has to look like about 1500 ohms for a good signal transfer. With both caps equal and at resonance, we would have a center tap on the coil at about 375 ohms. Are you comfortable with why the impedance at coil center is 1/4 of the whole coil's impedance?

Now, let's match this to a 50 ohm antenna input. Increase the lower capacitor. This effectively moves our tap down the coil and gives a lower impedance point. Maybe we are at 200 ohms now. This has detuned us from resonance by increasing the series capacitance combination,

however, so we reduce the top capacitor a bit until the combination is again at resonance. Ok, let's increase the lower cap again, perhaps we are down to 125 ohms now. Again, tune the upper cap to restore resonance. Another increase to the lower cap may get us to 50 ohms finally. Again, retweak the upper cap for resonance and we are there.

This is a rather mechanical explanation of what is going on, but I hope it helps you see how capacitive tapping is used for impedance matching. In reality, you would just calculate the coil and the capacitors and put it together. The tolerance on the bottom cap would be such that it would be fixed. Then, either the top cap or the coil would be variable to allow for exact resonance. In Paul's example, the coil has a variable slug for tuning, so the top cap can be fixed.

Incidentally, if this sounds familiar to any OT's out there, it is the same way the old pi network rigs were tuned and loaded :-)

73, Bob N6WG

Date: Wed, 19 Aug 1998 14:41:37 EDT
From: MNHopkins@aol.com
To: QRP-L@Lehigh.EDU
Subject: [17909] SPAMing the CB Slider
Message-ID: <e0cb2848.35db1c62@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

To SPAM something is to try to sell it to an unreceptive or audience, or to an unsuspecting one, or it means a tasteless canned meat product. This is in the nature of the last two, at least.

Bruce M's restatement of the Doug DeMaw VFO project built in a SPAM can looks like a lot of fun and, best of all, you won't have to rub elbows with the circuit idiolotors who insist on a commercial board -- there isn't one.

If you have poor luck finding websites as I do, be assured that:

<http://www.fix.net/~jparker/norcal/cbslider/cbslider.htm>

took me right to Norcal and I found it in the index.

All that said, you might want to say a kind word to Bruce. He will be missing a lot of sleep. In a weak moment of abandon he changed a link coupled output to a capacitive one. Frank Jones is dead, of course, but he'll be back

to haunt Bruce.

73 de ab5L, michael in dallas, student of Tecraft and International Crystal
(ICM) ham products and mementoes of Six Meters' Golden Age: 1957-58

Michael Hopkins

Box 226841

Dallas, TX 75222 MNHopkins@AOL.com

Date: Wed, 19 Aug 1998 14:42:34 -0400
From: Michael Maiorana <mikemo@ibm.net>
To: qrp1 <qrp-1@Lehigh.EDU>
Subject: [17910] Elmer 101 sprint
Message-ID: <35DB1C9A.80678578@ibm.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Last chance for sprint logs. Send them to me at mikemo@ibm.net

I'll tally the scores tomorrow and post the winners.

--

72 de ku4qo Mike Maiorana Palm Harbor, FL

Date: Wed, 19 Aug 1998 11:50:06 -0700
From: "Barry L. Geipel" <bgeipel@primenet.com>
To: "QRP-L" <qrp-1@Lehigh.EDU>
Subject: [17911] Newbie question - Random Wire Antenna
Message-ID: <199808191849.LAA17503@newspaper.cwi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hi again!

I am working out a number of antenna possibilities.
I have an old Dentron "Jr. Montitor" Antenna tuner

which has antenna connections for coax, balanced wire and random wire. It also has a ground connection. I assume this is similar to the current generation of MFJ tuners that I see being discussed here.

I tried to setup a random wire with no success.

I made a 35' wire from 22 guage wire. The top ot the antenna is up about 25'. It slopes down to my outdoor setup which has a tuner, SWR/Power meter and my HW-8. I am trying to do this on 40 meter. The antenna tunes up (SWR 1:1, relative power meter on the rig to full). After two days of calling CQ, no answers. Okay, what am I doing wrong?

After some research, I realized that the antenna tuner needed to be grounded. If that is true, which I assume it is, how go you do a random wire while backpacking (which I thought you could).

Any ideas on how to make this setup better?

Are there any easy ways to tell if I am actually radiating???

Thanks in advance

73 de KF6RDI

--

Barry L. Geipel (KF6RDI) ||
Email:bgeipel@primenet.com || Lacking a muse, my mauser
NRA HMGS-PSW ARRL || must be my thunderbolt
QRP-L #1653 ||
<http://www.primenet.com/~bgeipel/barry.html>

Date: Wed, 19 Aug 1998 12:02:16 +0000
From: Roger Hightower <n7kt@earthlink.net>
To: FrConrad@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17912] Re: NERDS and Cut Numbers
Message-ID: <35DABEC8.A94A8A07@earthlink.net>
MIME-Version: 1.0

```
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit
```

Why not just send RNW (didahdit dahdit ditdahdah) for .9W and really confuse them, :-)? This cut stuff can get out of hand if everyone isn't familiar with it....works OK in international 'tests, but not for mostly US or local club stuff.

— —

72/73, de Roger, N7KT - QRP-L #62 - Mesa, AZ

Date: Wed, 19 Aug 1998 19:13:58 GMT
From: n4js@pobox.com (John Sielke)
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [17913] Re: NERDS and Cut Numbers
Message-ID: <35dc216b.225374@mail.snip.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: quoted-printable

On Wed, 19 Aug 1998 13:36:26 EDT, you typed:

```
>I'm hoping to work NERDS on September 12 and I just turned down the =
SW40+ to
>900mw in order to get the multiplier.  Sending 900mw in the contest =
exchange
>sounds like a pain in the neck:
```

I just say "1 watt"

```
>  
> DAHDAHDAHDAH DIT  
> DAHDAHDAHDAH DAH  
> DAHDAHDAHDAH DAH  
> DAHDAH  
> DITDAHDAH
```

=20
 (N) (4) (J) (S) John L. Sielke n4js@pobox.com n4js@qsl.net
 NJ Grid:FM29LN <http://www.qsl.net/n4js>
 NJ-QRP #57 QRP-L #884 QRP-ARCI ARQrp #86
 G-ORP #9544 NorCal #1989 CQC AKQRP QCWA FISTS #2781

Date: Wed, 19 Aug 1998 15:27:40 -0400 (EDT)
From: Kevin Bunin <p014455b@pb.seflin.org>
To: Allan Taylor K7GT <k7gt@qsl.net>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [17914] Re: Cut numbers
Message-ID: <Pine.3.89.9808191539.A15270-01000000@pb.seflin.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Allan,

I was always under the impression "R" was used in placed of a decimal.
A period has always been didahdidahdidah. 1R5W is correct since R is used
as a decimal point.

It is only semantics, I guess, and splitting hairs. Sorry.

Kevin K4PG

-
Kevin Bunin
p014455b@pb.seflin.org

Date: Wed, 19 Aug 1998 19:39:51 +0000
From: Ed Loranger <we6w@qsl.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [17915] Re:Cut Numbers
Message-ID: <35DB2A07.5AD0@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The Real Cut numbers are on my Web page...

Also, 'R' stands for Radix and is defined by the
country you live in. So someplaces One Thousand
is 1.000,00 and other places it is 1,000.00

Radix

Let the Rollercoaster ride begin anew....

-Ed

Joseph Mikuckis wrote:

>

> This business of "2R8" threw me until I figured out that "R" stood
> for a period!

--

72, Ed WE6W qrp CW ONLY (VP-0); QRP-Z#106

< <http://www.qsl.net/we6w> > Santa Rosa, CA

Date: Wed, 19 Aug 1998 14:45:26 -0500 (CDT)

From: ac5ez@webtv.net (Larry B)

To: qrp-1@Lehigh.EDU

Subject: [17916] 2000 contacts

Message-ID: <8756-35DB2B56-1076@mailtod-122.bryant.webtv.net>

Content-Type: Text/Plain; Charset=US-ASCII

Content-Transfer-Encoding: 7Bit

MIME-Version: 1.0 (WebTV)

Geee, how many is that per day???

Ac5ez

Date: Wed, 19 Aug 1998 12:48:14 -0700 (MST)

From: Joe Gervais <vole@primenet.com>

To: qrp-1@Lehigh.EDU

Cc: azqrp@dancris.com

Subject: [17917] BUBBA Sprint / Software Engineers Needed (really!)

Message-ID: <199808191948.MAA00268@usr07.primenet.com>

Howdy Folks,

You may (or may not) have noticed that I've been unusually quiet here. No BUBBA Sprint chatter, no QRPTTF results (still!), etc. Bottom line is that I'm getting devoured at the office. No bull. Not an excuse, just a fact. Nearly *every* aspect of my life is on hold for the foreseeable future.

BUBBA is still set for Aug 30th! I just haven't been able to get on and clarify rules/remind folks. Please

check out ScQRPion Bob's webpage at <www.dancris.com/~ki7mn>
for full BUBBA details. Haven't been able to read QRP-L,
so I'm sending this "blind".

Apologies to all for being unresponsive. I'm really
hoping that "this too shall pass", but if not I'll just
admit it to myself and try to pass the torch. Will do
my best to be on for the CQC 'test this Sunday, and BUBBA
the following weekend. With the 'spots looking up, maybe
we can find some DX QRP ops on 15m/10m to join us!
Remember, it's all about getting on the air. Anything
else is just talk. :)

So why should you care about my work crunch? Well, if
you're a software- or system engineer I can get you a
job! Sure, Phoenix summers are hot, but that's why God
invented A/C. :-) I'm serious about the job part. C++,
C (or possibly FORTRAN), Unix development. Experience
in a formal software development environment a plus
(OOA/OOD, the usual buzzwords). We get every other Friday
off here (well, unless your project is under-staffed and
facing key deadlines... ;-)), and we get paid overtime,
401K matching, and good health/retirement benefits.
Relocation expenses covered. Call me at (602) 925-7351
if interested, because I won't be able to check email or
read QRP-L.

What does this have to do with QRP? Well, the more of
you that relocate, the more fun we'll have at ScQRPion
meetings. ;-) And maybe, just maybe, we can fill some
staffing gaps and get my project off the critical path,
so I can enjoy time with my friends again, both on and
off the air.

You never realize how many friends you have here on
QRP-L until you lose contact with them. :-(Hope
all's well with everyone, and may the D-layer leave
your signals untouched.

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"If it ain't fun, you ain't doin' it right!" -The AZ ScQRPions

Date: Wed, 19 Aug 1998 13:10:22 -0700
From: "Bill Todd" <bill@willapabay.org>
To: <n4js@pobox.com>
Cc: <qrp-1@Lehigh.EDU>
Subject: [17918] Re: NERDS and Cut Numbers
Message-ID: <004f01bdcbad\$669ba8e0\$2a4ffbce@default>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

-----Original Message-----

From: John Sielke <n4js@pobox.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Date: Wednesday, August 19, 1998 12:27 PM
Subject: Re: NERDS and Cut Numbers

On Wed, 19 Aug 1998 13:36:26 EDT, you typed:

>I'm hoping to work NERDS on September 12 and I just turned down the SW40+
to
>900mw in order to get the multiplier. Sending 900mw in the contest
exchange
>sounds like a pain in the neck:

I just say "1 watt"

Sounds like the right solution. Just saying "1 wt" is fine for the NERDS
contest.

The reason I like hearing the power being used by the other operator, is
that it is always a treasure to work someone who has the GUTS to use one
watt or less!

CUL, Bill-N7MFB

Date: Wed, 19 Aug 1998 16:17:48 EDT
From: ARDUJENSKI@aol.com
To: bill@willapabay.org, owner-qrp-1@Lehigh.EDU, qrp-1@Lehigh.EDU
Subject: [17919] Re: NERDS and Cut Numbers
Message-ID: <42c793b4.35db32ed@aol.com>
Mime-Version: 1.0

Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Since the contest is QRP and QRPP just send P or PP
Alan KB7MBI (just cudnt resist)

Date: Wed, 19 Aug 1998 15:14:02 -0500
From: applitech@mcg.net (Claton Cadmus)
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [17920] Re: The PERFECT GROUND?
Message-ID: <004501bdcbaf\$1186bc80\$a10a5e2c@groucho>

> drilling down say 33 ft and inserting a copper pipe to act as the
> ground side for a vertical,

This is similiar to the question I asked about dropping a 33' wire in a hole
in the ice of a frozen lake for FYBO. ;-)

This would be a lot of work for really no return, radials will work better.
It would be much better to use the pipe above the ground and make a vertical
dipole, at least this would get the area of maximum radiation up in the air
and perhaps lower the radiation angle too. Your mileage may vary.

73 de KA0GKC Claton Cadmus
cla@mcg.net
MNQRP #1
Minnesota QRP'ers we're looking for you!
Email me or visit this page <http://www.qsl.net/mnqrp>

Date: Wed, 19 Aug 1998 16:26:29 EDT
From: MNHopkins@aol.com
To: QRP-L@Lehigh.EDU
Subject: [17921] Shucks, folks there IS a CB Slider board
Message-ID: <faed5cc1.35db34f6@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Ain't it the truth. Just look:

Subj: CB Slider Posting
Date: 98-08-19 16:17:42 EDT
From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)
To: MNHopkins@aol.com

Michael, I read with interest your posting on the CB Slider and note that you have made an error. There is a circuit board available, and it says so right in the article, plus there is another link to information on how to order the board. Here is the quote from the Web Page:

"Circuit Board Notes

Try as I might I could not get the original circuit board layout to work with my new parts. So, I built a test model on a piece of perf-board (see Figure 1). In the final layout I tried to stay with the spirit of the original by sticking to large squarish pads. A circuit board is available from FAR Circuits, but if you don't want to buy the board, point to point wiring on perf-board works well."

Now you may choose to build it with perfboard, but your statement that there is no circuit board is not true.

Here is the ordering information:

Circuit Boards for this Project are available from FAR Circuits, 18N640 Field Ct., Dundee, IL 60118. The cost for the CB Slider board is \$5 plus \$1.50 shipping and handling for 1 - 4 boards. Please specify NorCal CB Slider VFO Board when ordering.

The above information was under the mods to the Tuna Tin 2 section of the article. I am sending this information to you privately to give you the correct information. 72, Doug, KI6DS

*****but of course it didn't work. You can always tell Michael, but you can't tell him much.

73 de ab5L, michael in dallas, student of Tecraft and International Crystal (ICM) ham products and mementoes of Six Meters' Golden Age: 1957-58

Michael Hopkins

Box 226841

Dallas, TX 75222 MNHopkins@AOL.com

Date: Wed, 19 Aug 1998 15:38:18 -0500
From: Bob Liesenfeld <wb0poq@visi.com>
To: QRP-L reflector <qrp-l@Lehigh.EDU>
Subject: [17922] Coil lube update
Message-ID: <35DB37BA.20B97F8A@visi.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Gang,

Well here are the results of my search for a good coil lube. As I posted earlier, I was about to align an older receiver that uses a number of those small diameter coil forms with a hex keyed powdered iron slug. With age, many of these slugs tend to freeze in the form, coupled with the fact that many of these forms are not well designed, which made them tough to turn in the first place.

Many people responded with several helpful suggestions, thanks to all! I tried a bit of WD-40, but this seemed to only cause more binding. I finally settled on a drop or 2 of 3-in-one oil, and let them sit overnight. While this did not completely eliminate the trouble, it seemed to loosen them up to the point where they did not *crack* when trying to turn them.

Thanks again for all the input from the list es 72

--
Genuine E-mail From the Land of the Everlasting Icicle...
Bob Liesenfeld
wb0poq@visi.com

Date: Wed, 19 Aug 1998 14:13:30 -0700 (PDT)
From: Monte Stark <ku7y@sage.dri.edu>
To: "James W. Cates" <wager@juno.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17923] Re: NorCal 20 kits sold out!
Message-ID: <Pine.SOL.3.96.980819135703.15196B-1000000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Jim,

SUPER Job! What you and Doug have done is really great.

(I want to know what you guys are going to come up with to top this!)

cul,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Wed, 19 Aug 1998 14:13:56 -0700
From: Bill Jones <kd7s@psnw.com>
To: qrp-l@Lehigh.EDU
Subject: [17924] Wide-band receiver front end question
Message-ID: <35DB4014.D7EF545@psnw.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Friends,

In today's continuous coverage receivers, how does the manufacturer provide front end filtering to the first mixer?

=====
Bill Jones - KD7S <><
Sanger, California
<http://www.psnw.com/~kd7s>
=====

Date: Wed, 19 Aug 1998 20:57:45 +0100
From: Leon Heller <leon@lfheller.demon.co.uk>
To: flydnq7x@primenet.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17925] Re: HB: Isolated pads (islands?)

Message-ID: <qhZSPAA54y21Ew7U@lfheller.demon.co.uk>
MIME-Version: 1.0

In message <199808191552.IAA05026@smtp04.primenet.com>, Floyd Smithberg
<flydnq7x@primenet.com> writes

>>

>>A few other gadgets that have paid for themselves in my shop:

>>1. Set of drills and taps for 2-56, 4-40 and 6-32

>>2. Graduated drill bit (for expanding a small hole up to 1/2 inch
>> in small steps for switches, BNC's, etc.)

>>3. Set of jeweler files (round, square and triangle shaped)

>>4. Hot glue gun

>>5. Pair of sissors (great for reaming out a hole, but don't tell xyl!)

>>6. Small penlight flashlight

>>7. Rubidium beam deep etch engraving laser (hey, I'm kidding!)

>

>I couldn't get along without my.....

>>8. Jewelers eye loupe...2X to 5X.

>>9. Jewelers tweezers.

>>10. Dentists pick/scraper.

>>11. Desoldering iron...R/S 64-2060

>>12. Tapered reamer....1/4 to 1/2"

>>13. Tapered pipe reamer for 1/2 to 1 1/2" hole stretching.

>>14.and more

>73 Floyd NQ7X Phoenix ScQRPion

I probably have the ultimate in tools: a little Sherline milling machine and a Taig microlathe. I got them partly for microwave fabrication but haven't used them very much. I've just made a little mandrel on the lathe for winding pot core bobbins on the mill and I'm designing a small attachment for the mill which will turn it into a drilling machine for PCBs. It'll basically be a small table clamped to the mill table, which can be raised and lowered with a spring-loaded lever.

I knew someone with a lathe who used to make his own mini "roller coaster" inductors from plastic tubing for QRP.

Leon

--

Leon Heller: leon@lfheller.demon.co.uk <http://www.lfheller.demon.co.uk>

Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424

See <http://www.lfheller.demon.co.uk/dds.htm> for details of a simple AD9850 DDS system. See " /diy_dsp.htm for a simple DIY DSP ADSP-2104 system.

Date: Wed, 19 Aug 1998 21:16:56 +0000

From: "Adam B. Kanis" <adam-kanis@uiowa.edu>
To: qrp-1@Lehigh.EDU
Subject: [17926] twin-lead through metal, how?
Message-ID: <35DB40C8.D59DDD1C@uiowa.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

hi all,

i'm going to try out the slv this weekend, i was looking to feed it with twin-lead. i know that with twin-lead, metal is supposed to be avoided. can somebody give me some PRACTICAL guidelines as to how sensitive this will be to nearby metal.

i live in a mobile home, so i'm surrounded by the metal of the skin. for right now, i was going to pass the twinlead out the window - so it will be running out perpendicular to the metal window frame and the metal skin of the home. is that going to be a problem? once outside, it's a straight shot away from the home to where the SLV will be.

inside, i can work to keep the twinlead off the wall on the way to the tuner, but how far from the wall is enough?.

thanks in advance.
--adam

Adam B. Kanis, N2BRT
adam-kanis@uiowa.edu QTH: Wellman, IA (Near Iowa City) EN41ck
--- ARRL:RSGB:QRP-ARCI:GQRP:QRP-L:NorCal:Iowa QRP:SEITS ---
** On the web at <http://genome33.ped-gen.uiowa.edu/hamradio> **

Date: Wed, 19 Aug 1998 17:44:56 -0400
From: cy r currier <crc3@telplus.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>,
"jwodel@ameritech.net" <jwodel@ameritech.net>
Subject: [17927] RE: tuner losses
Message-ID: <01BDCB99.DE784260@bgr94.lobster.net>

MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: quoted-printable

i believe the air inductors are more efficient but the torroids are =
smaller. everything in design is a compromise. use torroids to keep it =
small, but i still prefer air wound if u must have a tuner. the balanced =
line guys need one to be multiband.=20
a perfectly cut dipole/inv vee w unbalanced line will avoid the tuner =
loss and provide more to the antenna. i prefer this approach w qrp. at =
the qrp power levels the caps can be much smaller . huge caps of the =
tube/high power days had to have 3/8 " spacing. a class c amp gave u 4 =
times ebb at the output. that's why u needed 4 kv silver mica caps in =
the output/tank circuit.=20
if ur tuner is needed and works properly, and room isn't a problem, why =
not just use it? it may be valuable to some qro person but why give them =
more to their ant for us to listen to? i hope it helps cy - kites

From: Jerry W. O'Dell
Sent: Monday, August 17, 1998 8:09 AM
To: Low Power Amateur Radio Discussion
Subject: tuner losses

I am a relatively old person, and learned that for low losses,
one needs large inductors and big boxes in antenna tuners.

My question simply is just how much loss there is in toroids,
which at least gets around the big box problem?

I am sitting here looking at my 60's Millen tuner, which=20
is about the size of a house, it seems. It's a nice machine.
Gates radio construction, as it were (huge).

73 jerry w8gnd

Date: Wed, 19 Aug 1998 22:53:47 +0100
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: FrConrad@aol.com
Cc: qrp-l@Lehigh.EDU
Subject: [17928] Re: NERDS and Cut Numbers

Message-ID: <199808192153.WAA04869@chuck.dallas.sgi.com>

John,

R9W is much easier..... :-)

Chuck Adams K5FO Dallas,TX CP-60
<http://reality.sgi.com/adams> adams@sgi.com

Date: Wed, 19 Aug 1998 15:10:24 -0700 (MST)
From: Chris Trask <ctrask@primenet.com>
To: Bill Jones <kd7s@psnw.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17929] Re: Wide-band receiver front end question
Message-ID: <Pine.BSI.3.96.980819150959.5659A-100000@usr08.primenet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 19 Aug 1998, Bill Jones wrote:

> Friends,
>
> In today's continuous coverage receivers, how does the manufacturer
> provide front end filtering to the first mixer?
>

Some of them don't bother, except for a small low-pass filter.

What's all this
extinct stuff, anyhow?



Circuit Design for the
RF Impaired

Chris Trask / N7ZWY
Principal Engineer
ATG Design Services
P.O. Box 25240
Tempe, Arizona 85285-5240

Technical Editor,
QRP Quarterly
QRP ARCI 9464

Email: ctrask@primenet.com
<http://www.primenet.com/~ctrask>

Graphics by Loek Frederiks

Date: Wed, 19 Aug 1998 17:13:24 -0500
From: Tellefsen Bob-CNSE97 <cnse97@lmpsilo2.comm.mot.com>
To: aa1qj@ids.net
Cc: QRP-L list <QRP-L@Lehigh.EDU>
Subject: [17930] Re: Drilling holes for ZM-2
Message-ID: <E726B6D1F2C7D1119AB900805FA74B3CDC3955@s-il02-n.comm.mot.com>
MIME-Version: 1.0
Content-Type: text/plain

Laurent

If you can't locate a stepped drill, I suggest you try a tapered reamer as an alternative.

You can start with a hole smaller than you need, then use the tapered reamer to gently enlarge it to whatever size is needed. I did this for a long time until I discovered the stepped drill at my local hardware store. Absolutely fantastic tool, but not available everywhere apparently.

73, Bob N6WG

Date: Wed, 19 Aug 1998 16:25:46 -0600 (MDT)
From: Paul Harden <pharden@aoc.nrao.edu>
To: Bill Jones <kd7s@psnw.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17931] Re: Wide-band receiver front end question
Message-ID: <Pine.SOL.3.91.980819160615.25482A-100000@zia>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 19 Aug 1998, Bill Jones wrote:

> In today's continuous coverage receivers, how does the manufacturer
> provide front end filtering to the first mixer?
>
> =====
> Bill Jones - KD7S <><

Bill,

That is a very good question. There are several approaches, but let's

take the more typical example of a modern general coverage shortwave receiver with digital synthesis tuning.

First, the digital tuning "knob" is usually a digital encoder shaft, that causes a digital counter to count up or down. This counter is the divide ratio in the phase lock loop that forms the local oscillator from the reference frequency. (The reference frequency is the same as the tuning steps, so if it tunes in 1KHz steps, then the reference frequency has also been divided down to 1 KHz). The point is, the higher order counter bits will increment their count every few MHz or so. This in turn is decoded into control signals that are a logic HI for say 1-3 MHz, 4-6 MHz, 7-11 MHz, etc. These signals are then used to electrically switch in the proper filters in the front end of the receiver ... either through energizing a relay(s), diode switches, PIN diode switches, FET switches, etc. In some receivers, a microprocessor will generate the signals to kick in the proper front end filters based on the exact frequency that the filters begin to roll-off, kicking in the next set.

These front end filters are very similar to what you see in QRP rigs, except they are composed entirely of fixed components, since even still, the bandwidth is several MHz. Also, you will often see combinations of parallel and series L-C tuned circuits, all centered at slightly different frequencies, to achieve the wide bandwidths, and keep the input impedances more or less normalized at different frequencies.

In my FRG-100, for example, I believe there are 8 sets of input RF filters to cover the 30KHz to 30MHz range. The control signals are developed by a microprocessor, buffered through optical isolators, and then applied to the appropriate diodes to enable the proper filter section.

It is possible to make very wideband input RF amplifiers and mixers, but of course, you have no preselection filtering in this case.

GL, Paul NA5N

Date: Wed, 19 Aug 1998 22:30:17 +0000
From: Ed Loranger <we6w@qsl.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [17932] Smart Charger Deal #2!!!!
Message-ID: <35DB51F9.6531@qsl.net>
Mime-Version: 1.0

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gangue, The EDS Automatic Float charger deal is nearly wrapped up. Got rid of 15 of them with only 2 remaining to be sent out while I wait for their \$3.00/Box/Trade.

So I guess I'm ready to organize another heck of a deal for my QRP buddies!

OK!

By email arrangement with me, I will organize a list of recipients, stopping at TEN.

Deal: Once you are on the list, and I've emailed confirmation here's the deal:

You send me:

\$5.00 for Shipping and a QRP
or Ham Radio Toy or toys from
your collection of Goodies. YOU
decide what you want me to have.
Minimum value is up to you, like
a NORCAL LOG BOOK! Or other Items I can
use at the station.

I will send to you in a 6x6x6 Inch box:
GelCell Battery Charger of the NON-PULSING
type described as a ITE Charger/LINEAR
POWER SUPPLY, 13.6Volts @ 480 mA Loaded.
Designed for Low noise applications.

OTHER INFO:

This charger is amazing, it is so quiet.
And since it also doubles as a power
supply, I can run equipment off it.
Although it can only supply 480 mA so
you'd have to keep a Transmitter needs
within this range.

I opened one up to find a well made PC
board with control circuitry and Voltage
calibration trimmer pot. This is a very
smart Charger selected for Gel-Cell use.
It can be left on the battery as far as I

know.

Similar Models found at:

<http://www.jeromeindustries.com/products.htm>

The charger sells for \$60.00 each in bulk orders.

I will honor \$5.00 in an empty box but would prefer a trade in the \$5.00 to \$30.00 range but don't put yourself out. I'm spreading the wealth here to my buddies.

Please copy all coorespondence to my home account at we6w@juno.com as well as my we6w@qsl.net account. QSL.net is down today and I don't want to miss anyone.

ONLY TEN respondent for now.

Best 72!

-Ed Loranger QRP-Z#106

--

72, Ed WE6W qrp CW ONLY (VP-0); QRP-Z#106
< <http://www.qsl.net/we6w> > Santa Rosa, CA

Date: 19 Aug 1998 18:40:05 -0400
From: Glen Leinweber <leinwebe@mcmail.cis.McMaster.CA>
To: kd7s@psnw.com, qrp-l;;
Subject: [17933] Re: Wide-band receiver front end question
Message-ID: <1998Aug19.184005-0400@[130.113.234.7]>

In <35DB4014.D7EF545@psnw.com>, Bill Jones wrote:

>In today's continuous coverage receivers, how does the manufacturer
>provide front end filtering to the first mixer?
>

I think most divide the spectrum into perhaps five to seven sub-bands and provides a discrete (fixed) L-C bandpass filter for each.

As you tune from one sub-band to the next, the microprocessor switches from one filter to another with diode switches. I've got a SPICE plot of the Kenwood R2000 frontend filters...alright, I was curious one day with too much time on my hands. ;-) Lots and lots of little L's and C's with NO trimmers.

Date: Wed, 19 Aug 1998 15:32:15 -0700 (PDT)
From: KC5TJA <kc5tja@topaz.axisinternet.com>
To: Chris Trask <ctrask@primenet.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [17934] Re: Wide-band receiver front end question
Message-ID: <Pine.LNX.3.96.980819153032.7891A-1000000@topaz.axisinternet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 19 Aug 1998, Chris Trask wrote:

> > In today's continuous coverage receivers, how does the manufacturer
> > provide front end filtering to the first mixer?
>
> Some of them don't bother, except for a small low-pass filter.

Couldn't one make a filter using varactor diodes? As one tunes across a band, a voltage would be fed back to the input pre-selector filter, adjusting the filter accordingly.

=====

KC5TJA/6		- TEAM DOLPHIN -
DM13		Samuel A. Falvo II
QRP-L #1447		http://www.dolphin.openprojects.net
Oceanside, CA	

End of QRP-L Digest 1188

